

Groundwater Assessment Report of the Former IB Basin

**Hercules Incorporated
Hattiesburg, Mississippi**

**Prepared for:
Hercules Incorporated**

November 2009

Eco•Systems, Inc.
Consultants, Engineers, and Scientists



Eco-Systems, Inc.
Consultants, Engineers, and Scientists



November 10, 2009

Mr. Chris Sanders
Environmental Compliance and Enforcement Division
Office of Pollution Control
515 Amite Street
Jackson, MS 39201

RE: IB Basin Groundwater Assessment Report
Hercules, Inc.
613 West 7th Street
Hattiesburg, Forrest County, Mississippi

Dear Mr. Sanders:

Eco-Systems, Inc. (Eco-Systems) has prepared this Groundwater Assessment Report for the Hercules, Inc. facility located at 613 West 7th Street, Hattiesburg, Forrest County, Mississippi. The primary purpose of the assessment was to determine groundwater conditions in the vicinity of the IB Basin. This report includes field activities, analytical results, and findings and conclusions from the September 2009 assessment.

If you have any questions, please do not hesitate to contact us at (601) 936-4440.

Sincerely,
Eco-Systems, Inc.

Chris Waters Jr.

Caleb H. Dana, Jr., P.E.
Senior Principal Engineer

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Dept of Environmental Quality
Office of Pollution Control

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1.0 INTRODUCTION

Hercules Incorporated (Hercules) commissioned Eco-Systems, Inc. (Eco-Systems) to conduct a groundwater assessment in the vicinity of a former wastewater impoundment (IB Basin) at the Hattiesburg, Mississippi facility. The site location is shown in **Figure 1**. The work is being conducted in accordance with the work plan prepared by Eco-Systems, Inc. (Eco-Systems July 2009) which was approved (with revisions) by the Mississippi Department of Environmental Quality (MDEQ) in a letter dated July 22, 2009.

1.1 PURPOSE AND SCOPE

The purpose of this assessment was to determine groundwater conditions in the vicinity of the former IB Basin prior to closure. The scope of this assessment included the following activities:

- Installation of five permanent monitoring wells;
- Determination of groundwater elevations and flow direction;
- Collection and analysis of groundwater samples from the new installed monitoring wells; and,
- Preparation of a report documenting field activities and analytical results.

2.0 SITE DESCRIPTION AND HISTORY

2.1 SITE LOCATION AND DESCRIPTION

The Hercules plant facility is located within the City of Hattiesburg of Forrest County, Mississippi. The facility encompasses approximately 170 acres and is irregular in shape. The property is relatively flat on the southern side with gentle relief to the north and west. Surface water drains northward into Greens Creek which traverses the facility on the north side. A layout of the facility is provided in **Figure 2**.

The surrounding area is a mixture of industrial, commercial, and residential uses. The plant is partially bordered on the north by Highway 42. Greens Creek flows eastward through the northern portion of the site and then flows northward and discharges into the Bouie River. Commercial properties are situated along the north side of Highway 42 and industrial properties to the north/northwest of the facility site. Providence Street borders the subject site to the east with some commercial, residential, and undeveloped property situated on the east side of the street. Hercules also owns a parcel of land on the east side of the street which is occupied by a holding tank (ET-10 Tank). West 7th Street borders the subject property to the south with a mixture of commercial and residential properties located on the south side of the street. Hercules also owns a parcel of land located on the south side of 7th street which is used for parking. A cemetery borders the subject site on the southwest side of the property with industrial and residential property located to the west of the site.

2.2 SITE ENVIRONMENTAL HISTORY

The Hattiesburg, Mississippi facility was developed in the 1920s as Hercules Powder Company and occupies approximately 170 acres. The facility began operations processing wood stumps onto a variety of products. In the mid-1960s the name was changed to Hercules, Inc. The facility began downsizing starting in the late 1970's. In 2008, Hercules Incorporated was purchased by Ashland Incorporated. Currently, there is one active plant on the property: the Kymene Plant. In 2009, Ashland announced the closure of the facility by the end of the year.

On June 10, 2009, Ashland met with the MDEQ to discuss proposed environmental activities associated with the closing of the Hercules facility. During that meeting groundwater conditions adjacent to the IB Basin relating to basin closure activities was discussed as a concern. On June 15, the MDEQ submitted correspondence requesting that a work plan be prepared to assess groundwater conditions at the basin. On July 1, 2009, Ashland submitted a brief outline proposal for assessing groundwater conditions and quality in the vicinity of the basin. On July 22, 2009, the MDEQ submitted a letter response requesting minor alterations to the plan approach. Eco-Systems was commissioned to prepare a detailed work plan for submittal to the MDEQ, based on the plan approach.

3.0 SITE GEOLOGY AND HYDROGEOLOGY

Soils encountered in borings installed during previous investigations conducted at the site were described as silty, sandy, clayey alluvial deposits and fill materials overlying a dense, gray, sandy clay, which is interpreted to be the Hattiesburg formation. In the vicinity of the IB the shallow soils consisted of fill material, silts, silty clay and alluvium sands to a depth of approximately 20 to 25 feet below ground surface (ft bgs). Below the alluvium material the Hattiesburg formation clays are expected to provide an aquitard across the area.

The Hattiesburg Formation, which has been described as dense, gray, silty clay, has been encountered in all site borings that have penetrated the overlying alluvial material. Previous site soil boring data indicate that the Hattiesburg Formation is consistent across the site. The Hattiesburg formation is at least 20 feet thick beneath the site and has a hydraulic conductivity of 1.28×10^{-7} cm/sec. The Hattiesburg formation, therefore, serves as a barrier to vertical migration of groundwater at the site.

As described in previous investigations, in the active portions of the plant operations, the potentiometric surface indicates the presence of a southwest to northeast trending divide. Groundwater northwest of the divide would tend to move northwestward towards Green's Creek. Groundwater southeast of the divide would tend to move southeastward. North of Green's Creek, the potentiometric surface indicates that groundwater moves generally southward towards Green's Creek. Green's Creek enters the site at the western extremity of the site and flows generally eastward across the northern end of the site.

4.0 FIELD ACTIVITIES

Field activities conducted during this assessment included the installation of five monitoring wells, groundwater elevation survey, and sample collection from the newly installed monitoring wells. A description of each of these field activities is described in the following sections.

4.1 SOIL BORING ADVANCEMENT

Field activities for the groundwater assessment were conducted at the site on September 15-16, 2009. Drilling activities were performed by Singley Environmental and Remediation Services of Columbia, Mississippi. A mobile drilling rig was utilized to advance five soil borings (B-20 through B-24) at the site. Prior to drilling, utilities were located at the site using the Mississippi One Call system and Hercules personnel. Locations of soil borings were placed in areas with the concurrence of the MDEQ to assess groundwater quality adjacent to, and downgradient of, the former IB Basin.

The five borings were advanced to depths that would allow for the installation of permanent groundwater monitoring wells. Soil borings were each advanced to total depths ranging from approximately 14 to 17 ft bgs. A detailed lithologic description of each probe boring is provided in Appendix A. Soil boring locations are shown in Figure 2.

4.2 MONITORING WELL INSTALLATION

On September 15-16, 2009, five (5) monitoring wells (MW-20 through MW-24) were installed within Soil Borings B-20 through B-24, respectively (Figure 2). The wells were installed using 4 ¼-inch, inner diameter, hollow-stem augers. Wells were installed through the augers or in a clean, open borehole. Augers were advanced approximately five feet into the uppermost saturated interval. After reaching the uppermost saturated interval, well screen and casing were placed to the desired depth. Filter sand was then placed in the annulus to a depth approximately two feet above the top of the screened interval. A bentonite seal was then placed in the annulus above the sand and allowed to hydrate. The remaining annulus was grouted with a Portland cement/bentonite slurry grout to within approximately six inches of ground surface. For Monitoring Wells MW-20, MW-22, and MW-24, a steel shroud was placed over each completed well and secured in the grout column. A concrete pad (2 ft x 2 ft x 4 inches) was framed and poured around each well, and a 3-inch diameter guard posts was set in concrete near each corner of the concrete pad. Due to the proximity to roadways, Monitoring Wells MW-21 and MW-23 were finished with surface completions. Surface completions consisted of a concrete pad (2 ft x 2 ft x 4 inches) around each well with a steel, flush-mount, protective cover. Well construction diagrams are provided in Appendix A.

Wells were constructed out of 2-inch nominal diameter, schedule 40 PVC casing and screen. Well screen lengths were 10 feet long and have 0.01-inch machine slots. Filter

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sand composed of 20/40 sieve clean quartz sand was placed to approximately two feet above the screened interval. Well seals consisted of approximately two feet of hydrated bentonite pellets.

Permanent monitoring wells were developed by alternately pumping the well until the discharge from the well was relatively free and clear of suspended sediment. Well development activities, including discharge quantities and development time, were recorded in the field log.

4.3 GROUNDWATER ELEVATION SURVEY

Site groundwater depth and flow directions were determined through a groundwater elevation survey conducted on September 28, 2009. Top of casing (TOC) elevations were determined for the newly installed monitoring wells using conventional survey equipment and tied to known elevations of previously existing wells at the site. Groundwater depths were measured using a water level indicator from the same point on the TOC from which the elevation was determined. The TOC elevation and groundwater depth were used to determine groundwater elevation, flow direction, and hydraulic gradient.

Static groundwater depths in Monitoring Wells MW-20 through MW-24 ranged from approximately 2.28 ft to 8.00 ft below TOC. Depth-to-water measurements are summarized in **Table 1**. Groundwater flow is generally to the east as shown in **Figure 3**. The average hydraulic gradient is approximately 0.017.

4.4 GROUNDWATER SAMPLE COLLECTION

Each well was allowed to stabilize for a minimum of seven days prior to sampling. A minimum of three to five well volumes of water were removed from each well using a peristaltic pump with clean, disposable tubing. Purgging was continued until temperature, conductivity, and pH within the well were stabilized to ensure representative groundwater conditions existed.

Field analysis of pH, conductivity, temperature, and dissolved oxygen (DO) were conducted using YSI 30 and YSI 55 Series water quality meters. Calibrations were performed prior to field use in accordance with manufacturer guidelines. Groundwater sample collection data are provided in **Appendix B**.

Samples were obtained by *low flow/low stress* methods using a peristaltic pump with disposable tubing to prevent cross contamination during the sampling process. Disposable vinyl gloves were also worn during the sample collection and changed between each sample acquisition.

Each sample was transferred from the tubing into laboratory prepared, containers and immediately preserved on ice to approximately 4° C. Each sample was properly labeled with project name, sample date and time, sample identification number, analysis required,

and samplers' name. This information was also documented on a chain-of-custody form. Groundwater samples collected for laboratory testing were transported along with chain-of-custody records to TestAmerica laboratories, in Savannah, Georgia for analysis of volatiles per EPA Test Method 8260B, semi-volatiles per EPA Test Method 8270C, Organochlorine Pesticides and PCBs per EPA Test Method 8081, and 8 RCRA Metals per EPA Test Methods 6010/7470. Groundwater samples were submitted to Bonner Analytical Testing Company (BATCO) in Hattiesburg, Mississippi for analysis of Delnav per EPA Test Method 3510C (modified).

4.5 INVESTIGATIVE-DERIVED WASTE

Investigative-derived waste (IDW) including soil cuttings, development water, and personal protective equipment that were generated during field activities were containerized in 55-gallon drums immediately following generation. The containerized IDW were placed into the plant drum containment area for pending disposal.

4.6 QUALITY ASSURANCE/QUALITY CONTROL

For quality assurance/quality control (QA/QC) purposes, one duplicate groundwater sample, one rinsate sample, one trip blank sample, and one matrix spike and matrix spike duplicate (MS/MSD) were collected during field sampling activities. The duplicate groundwater samples were collected in alternating aliquots that were placed in each replicate bottle until each bottle was filled. The rinsate samples were prepared by pouring deionized water over groundwater sampling tubing and collecting the rinsate into new disposable sample containers supplied by the analytical laboratory. QA/QC samples were labeled, stored and shipped in the same manner as groundwater and surface water samples. QA/QC samples were analyzed for the same constituents as groundwater and surface water samples.

4.7 DECONTAMINATION

Drilling equipment used to install monitoring wells (drill rods and samplers) was decontaminated by high-pressure steam cleaning prior to beginning each boring. In general, groundwater sampling equipment that would contact the groundwater sample was single-use, disposable equipment. For any re-usable groundwater sampling equipment decontamination was accomplished by the following procedure:

- 1) Phosphate-free detergent wash.
- 2) Potable water rinse.
- 3) Deionized water rinse.
- 4) Isopropanol rinse.
- 5) Organic-free water rinse or air dry.

If it was necessary to store or transport decontaminated equipment, the decontaminated equipment was placed in either a new, disposable plastic bag or wrapped in aluminum foil.

4.8 OTHER PROCEDURES

Procedures for soil boring and well installation, sample collection, sample containerization and packing, sample shipment, cross-contamination control, drummed material disposal, field documentation, chain-of-custody, data review, and other work items not specifically covered in this document were conducted in accordance with the Environmental Investigations Standard Operating Procedures and Quality Assurance Manual (EPA Region IV, May, 2001), (EISOPQAM)

5.0 LABORATORY ANALYTICAL RESULTS

Groundwater samples collected from the Hercules site were analyzed for Appendix IX VOC's according to U.S. EPA Method 8260B, SVOCs according to EPA Method 8270C, Organochlorine Pesticides and PCBs per EPA Test Method 8081, Delnav per EPA Test Method 3510C (modified), and 8 RCRA Metals per EPA Test Methods 6010/7470. The results were compared to the MDEQs Target Remedial Goals (TRGs). The TRGs are found in the Tier 1 TRG Table of the Final Regulations Governing Brownfields Voluntary Cleanup And Redevelopment In Mississippi, published by the Mississippi Commission on Environmental Quality and adopted May 1999 and revised March 2002. Laboratory analytical reports for the samples collected during this investigation are included in **Appendix C** and summarized in **Table 2**, **Table 3**, **Table 4**, and **Table 5**.

5.1 VOLATILE ORGANIC COMPOUNDS

Laboratory analysis of groundwater samples for volatile organic compounds reported seven parameters above the method detection limit. Acetone was detected in two monitoring wells (MW-22 and MW-23) in concentrations of 86 micrograms per liter ($\mu\text{g/l}$) and 1,600 $\mu\text{g/l}$, respectively. Benzene was detected in four monitoring wells (MW-21, MW-22, MW-23, and MW-24) in concentrations ranging from 9.8 $\mu\text{g/l}$ to 9,200 $\mu\text{g/l}$. Chlorobenzene was detected in four monitoring wells (MW-21, MW-22, MW-23, and MW-24) in concentrations ranging from 7.7 $\mu\text{g/l}$ to 200 $\mu\text{g/l}$. Chloroform was detected in two monitoring wells (MW-21 and MW-23) at concentrations of 6,800 $\mu\text{g/l}$ and 1,500 $\mu\text{g/l}$, respectively. Methylene Chloride was detected in one well (MW-23) at 290 $\mu\text{g/l}$. 4-methyl-2-pentanone was detected in four wells (MW-21, MW-22, MW-23, and MW-24) in concentrations ranging from 11 $\mu\text{g/l}$ to 1,300 $\mu\text{g/l}$. Toluene was detected in two monitoring wells (MW-21 and MW-23) in concentrations of 640 $\mu\text{g/l}$ and 1,300 $\mu\text{g/l}$, respectively. The highest concentrations of acetone, benzene, chlorobenzene, methylene chloride, and 4-methyl-2-pentanone were detected in samples collected from Monitoring Well MW-23. The highest concentration of chloroform and toluene were detected in Monitoring Well MW-21. A summary of VOCs results is shown in **Table 2**.

5.2 SEMI-VOLATILE ORGANIC COMPOUNDS

Laboratory analysis of groundwater samples for semi-volatile organic compounds reported four parameters above the method detection limit. 1,1-Biphenol and phenol were detected in three monitoring wells (MW-21, MW-22, and MW-23) in concentrations ranging from 330 $\mu\text{g/l}$ to 2,600 $\mu\text{g/l}$ and 140 $\mu\text{g/l}$ to 4,600 $\mu\text{g/l}$, respectively. 1,4-Dioxane was detected in two monitoring wells (MW-21 and MW-23) at concentrations of 670 $\mu\text{g/l}$ and 1,100 $\mu\text{g/l}$, respectively. 3 & 4 Methylphenol was detected in one well (MW-23) at 610 $\mu\text{g/l}$. A summary of SVOCs results is shown in **Table 3**.

5.3 ORGANOCHLORINE PESTICIDES AND PCBs

Laboratory analysis of groundwater samples for organochlorine pesticides and PCBs reported all parameters below the method detection limit.

5.4 METALS

Laboratory analysis of groundwater samples for metals reported two parameters above the method detection limit. Arsenic was detected in one monitoring well (MW-23) at 27 µg/l. Barium was detected in five monitoring wells (MW-20 through MW-24) at concentrations ranging from 52 µg/l to 280 µg/l. The highest concentration of barium was detected in Monitoring Well MW-24. A summary of metals results is shown in **Table 4**.

5.5 DELNAV

Analysis for Delnav includes analysis for both the cis- and trans-isomers of dioxathion and for dioxenethion. Laboratory analysis of groundwater samples for dioxathion reported parameters above the practical quantitation limit (PQL) in two monitoring wells. Dioxenethion was detected in two monitoring wells (MW-21 and MW-23) at 185 µg/l and 202 µg/l. Dioxathion (cis) and dioxathion (trans) were detected in Monitoring Well MW-21 at 4.0 µg/l and 8.6 µg/l (respectively), and MW-23 at 21.1 µg/l and 19.4 µg/l, respectively. A summary of Delnav results is shown in **Table 5**.

5.6 QA/QC

Duplicate groundwater samples were collected from MW-23. Due to laboratory interferences, the regular sample was diluted by a factor of 50 and the duplicate sample was diluted by a factor of 100. The high dilution factors resulted in elevated method detection limits for some parameters. In some cases, the method detection limit exceeded the TRG. Analytical reports for the QA/QC samples are included in **Appendix C** and summarized in **Table 6**.

Volatile Organic Compounds

Analysis of the duplicate groundwater sample collected from MW-23 detected the same concentrations of toluene as was detected in the regular sample and similar concentrations of benzene, chlorobenzene, chloroform, and 4-methyl-2-pentanone. Acetone and methylene chloride, which was detected in the regular sample collected from MW-23 at a concentrations of 1,600 µg/l and 290 µg/l (respectively), were reported in the duplicate sample below their respective elevated reporting limits of <2,500 µg/l and <500 µg/l, respectively.

Review of the analytical reports for VOCs submitted by TestAmerica indicates that, with the exception of carbon disulfide, spike sample recoveries and relative percent differences (RPD) for volatile organic constituents in the MS and MSD samples were

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within the acceptable recovery ranges established by the laboratory. Carbon disulfide MS/MSD recoveries were biased high relative to the laboratory's control limit; however, carbon disulfide was not detected in any environmental sample.

As reported by TestAmerica, all method blanks, field/rinsate blanks, and trip blanks were non-detect for VOCs. The laboratory control sample (LCS) recoveries for VOCs were within acceptable limits, as were surrogate recoveries. Analyses were conducted within the 14 day holding time. Based on the information received and reviewed, the VOC analyses was conducted under controlled conditions and the data package is acceptable for use as reported, without qualification.

Semi-Volatile Organic Compounds

Due to laboratory interferences, the regular and duplicate samples were diluted by a factor of 10. Analysis of the duplicate groundwater sample collected from MW-23 detected similar concentrations of 1,1-biphenol and phenol. 1,4-dioxane and 3- & 4-methylphenol, which were detected in the regular sample collected from MW-23 at a concentrations of 850 µg/l and 490 µg/l (respectively), were reported in the duplicate sample at slightly higher concentrations of 1,100 µg/l and 610 µg/l, respectively. Naphthalene was detected below the elevated detection limit of <95 µg/l in both the regular and duplicate sample.

Review of the analytical reports for Semi-Volatile Organic Compounds (SVOCs) submitted by TestAmerica indicates that several spike sample recoveries and relative percent differences (RPD) for SVOCs in the MS and MSD samples were outside the acceptable recovery ranges established by the laboratory. With the exception of phenol, none of the compounds associated with the deficient MS/MSD recoveries were found in any environmental sample. In the case of phenol, MS recovery was acceptable. The MS/MSD samples and related environmental samples were reanalyzed and all target parameters were in control; however, the second analysis was conducted outside of the method-specified sample hold time. Both data sets were included in the lab report.

As reported by TestAmerica, all method blanks and field/rinsate blanks were non-detect for SVOCs. The laboratory control sample (LCS) recoveries for SVOCs were within acceptable limits. Some surrogate recoveries were low due to dilution effects. Initial analyses were conducted within the 7 day holding time, re-analysis due to MS/MSD performance exceeded the hold time. Based on the information received and reviewed, the SVOC analyses was conducted under controlled conditions and the data package is acceptable for use as reported, without qualification.

Organochlorine Pesticides & PCBs

Analysis of the regular and duplicate groundwater samples indicated all parameters below their respective method detection limits.

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Review of the analytical reports for pesticides and PCBs submitted by TestAmerica indicates that spike sample recoveries and relative percent differences (RPD) the MS and MSD samples were within the acceptable recovery ranges established by the laboratory.

As reported by TestAmerica, all method blanks and field/rinsate blanks were non-detect for pesticide and PCBs. The laboratory control sample (LCS) recoveries were within acceptable limits, as were surrogate recoveries. Analyses were conducted within the 7 day holding time. Based on the information received and reviewed, the pesticide and PCB analyses was conducted under controlled conditions and the data package is acceptable for use as reported, without qualification.

Metals

Analysis of the regular and duplicate groundwater samples collected from MW-23 detected similar concentrations of arsenic and barium.

Review of the analytical reports for RCRA metals submitted by TestAmerica indicates spike sample recoveries and relative percent differences (RPD) for metal constituents in the MS and MSD samples were within the acceptable recovery ranges established by the laboratory.

As reported by TestAmerica, all method blanks and field/rinsate blanks were non-detect for target analytes, with the exception of barium. Barium was detected in the rinsate blank at a concentration of 11 ug/l; the reporting limit is 10 ug/l. The laboratory control sample (LCS) recoveries for metals were within acceptable limits. Analyses were conducted within the holding times. Based on the information received and reviewed, the metals analyses were conducted under controlled conditions and the data package is acceptable for use as reported, without qualification.

Dioxathion

Analysis of the regular and duplicate groundwater samples collected from MW-23 detected similar concentrations of both *cis*- and *trans*-dioxathion as well as dioxenethion.

As reported by BATCO, all method blanks and field/rinsate blanks, were non-detect for dioxathion constituents. The laboratory QC spike sample recoveries were within acceptable limits. The samples were extracted within the 7-day holding time specified for organophosphorous compounds and analyzed within the 40-day extract hold time.

Based on the information received and reviewed, the dioxathion analyses was conducted under controlled conditions and the data package is acceptable for use as reported, without qualification.

6.0 FINDINGS AND CONCLUSIONS

Based on the data and observations made in the field, chemicals of concern (CoCs) were detected above the TRGs in groundwater at the former IB Basin. The impacts appear to be limited to the immediate general vicinity of the basin. Groundwater samples collected from both the upgradient monitoring well (MW-20) and furthermore downgradient monitoring well (MW-24) reported all parameters either below the method detection limit or TRG. Additional findings and conclusions are discussed below.

Groundwater Occurrence

Groundwater was initially encountered at depths ranging from approximately 5.0 to 9.0 ft bgs. Static groundwater elevations at the site ranged from 156.98 ft above mean sea level (amsl) to 162.67 ft amsl. Groundwater flow is generally to the east with an average hydraulic gradient of approximately 0.017.

Volatile Organic Compounds

Analysis of groundwater samples for VOCs detected seven parameters which exceeded the MDEQs TRGs. Acetone and methylene chloride were detected above their respective TRGs (608 µg/l and 5.0 µg/l) in Monitoring Well MW-23. Benzene was detected above the TRG of 5 µg/l in Monitoring Wells MW-21, MW-22, and MW-23. Chlorobenzene, chloroform, 4-methyl-2-pentanone, and toluene were detected above their respective TRGs (100 µg/l, 0.155 µg/l, 139 µg/l, and 1,000 µg/l) in Monitoring Wells MW-21 and MW-23. All remaining VOC parameters were reported below the method detection limit or TRG.

Semi-Volatile Organic Compounds

Analysis of groundwater samples for SVOCs detected three parameters which exceeded the MDEQs TRGs. 1,1-biphenol was detected above the TRG of 304 µg/l in Monitoring Wells MW-21, MW-22, and MW-23. 1,4-dioxane was detected above the TRGs of 6.09 µg/l in Monitoring Wells MW-21 and MW-23. 3 & 4 methylphenol was detected above the TRG of 201 (combined TRG for 3 methylphenol and 4 methylphenol) in Monitoring Well MW-23. All remaining SVOC parameters were reported below the method detection limit or TRG.

Organochlorine Pesticides and PCBs

Laboratory analysis of groundwater samples for organochlorine pesticides and PCBs reported all parameters below the method detection limit.

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Metals

Laboratory analysis of groundwater samples for metals reported all parameters either below the method detection limit or TRG.

Delnav

Laboratory analysis of groundwater samples for Delnav reported both the cis- and trans-isomers of dioxathion either below the method detection limit or TRG. There is no TRG for dioxenethion.

7.0 RECOMMENDATIONS

Based on the findings and conclusions of the groundwater assessment at the Hercules site, Eco-Systems recommends continued groundwater monitoring of wells at the former IB Basin. The monitoring of the five newly installed wells at the former IB Basin will be incorporated into the general site monitoring program beginning in 2010. In addition, should dewatering of the shallow aquifer be necessary during the closure of the IB Basin, removed liquids should be properly handled.

FIGURES



QUADRANGLE LOCATION

SOURCE: DeLORME 3D TopoQuads - HATTIESBURG, MISSISSIPPI

**HERCULES INCORPORATED
HATTIESBURG, MISSISSIPPI**

Eco-Systems, Inc.
Consultants, Engineers and Scientists



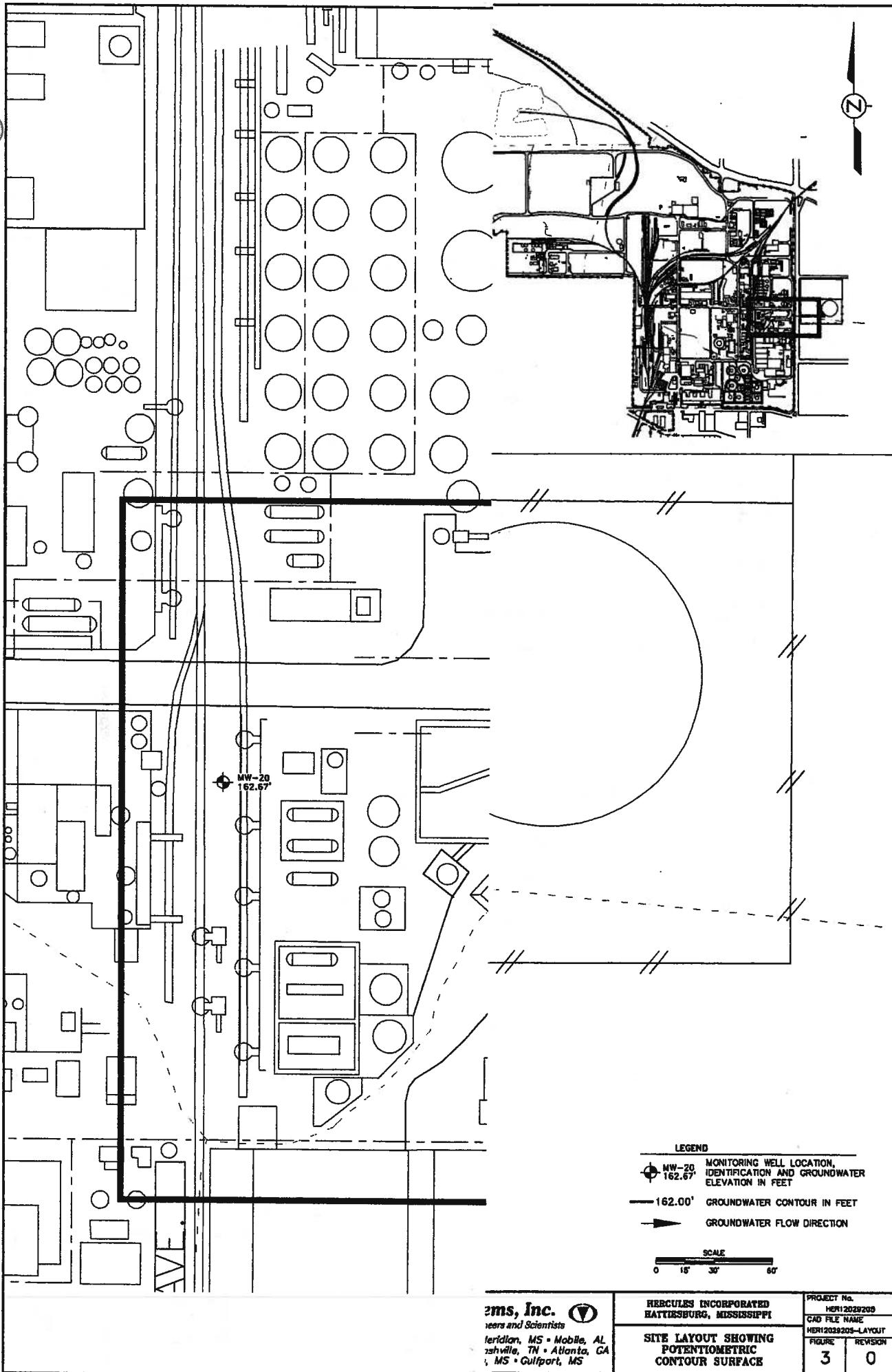
SCALE: 1"=2000'	DRAWN BY: MTW	DATE: 11/26/07
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CHKD. BY:	DATE:
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PROJECT NO. HER25080	CAD FILE HER25080-TOPO.dwg
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SITE LOCATION MAP

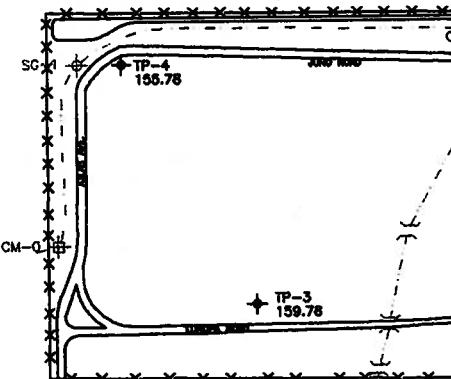
FIGURE
1





RESIDENTIAL/COMMERCIAL

GREEN'S



ZEON CHEMICAL
CORPORATION

LEGEND

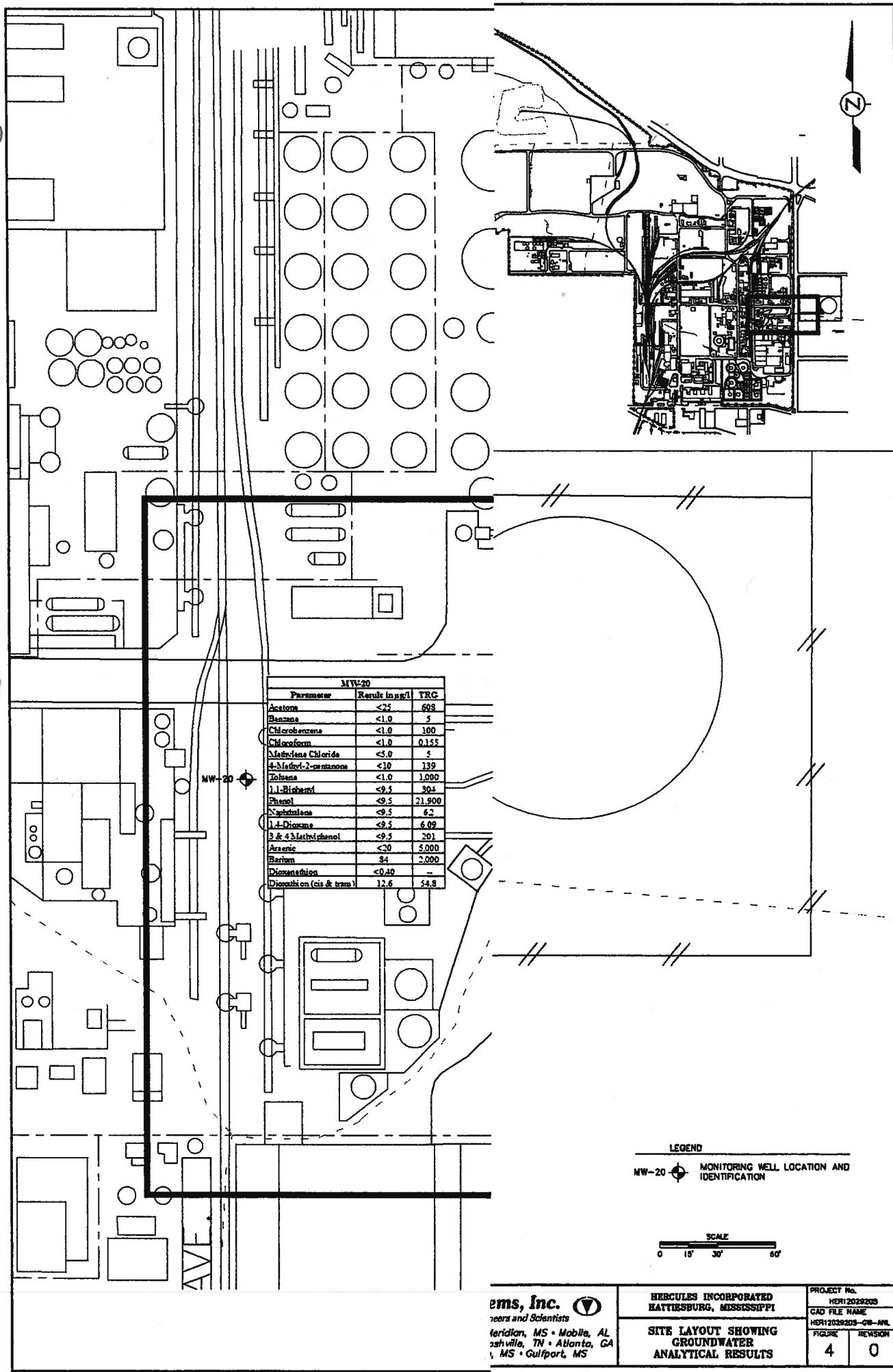
SG-1	STAFF GAUGE LOCATI	E110 TANK SEE DNG 4 FOR DETAILS	
MW-4	GROUNDWATER MONIT		
	GROUNDWATER ELEVA		
TP-12	PIEZOMETER LOCATIO		
CM-1	CREEK MEDIA SAMPL	TO	
	AND IDENTIFICATION	RIVER	
—	APPROXIMATE PROPE		
- - -	INTERMITTENT DRAINA		
- - -	APPROXIMATE BOUND		
	LANDFILL AREA		

NOTES

1. BASE MAP PROVIDED BY HERCI

SCALE

200 0 200 400 FEET



TABLES

TABLE 1

**GROUNDWATER ELEVATION SUMMARY
HERCULES, INC.
HATTIESBURG, MISSISSIPPI**

Monitoring Well ID	Survey Date	Top Of Casing Elevation (feet above MSL)	Survey Date	Depth To Water (feet-btoc)	Groundwater Elevation (feet above MSL)
MW-20	9/28/09	168.62	9/28/09	5.95	162.67
MW-21	9/28/09	163.66	9/28/09	2.28	161.38
MW-22	9/28/09	167.62	9/28/09	6.08	161.54
MW-23	9/28/09	162.38	9/28/09	2.96	159.42
MW-24	9/28/09	164.98	9/28/09	8.00	156.98

Notes:

*Top of Casing elevation based on 10 feet above MSL
obtained from USGS 7.5 minute Series Topographic Map, Hattiesburg, Mississippi Quadrangle*

MSL = mean sea level

Btoc - below top of casing

All measurements in feet!

TABLE 2
GROUNDWATER ANALYTICAL SUMMARY
VOLATILE ORGANIC COMPOUNDS
HERCULES, INC.
HATTIESBURG, MISSISSIPPI
(Parameters reported above the method detection limit)

Parameter	Monitoring Well ID						MDEQ TRG
	MW-20	MW-21	MW-22	MW-23 ¹	MW-23 (Duplicate) ²	MW-24	
Acetone	<25	<1,200	86	1,600	<2,500	<25	608
Benzene	<1.0	4,400	9.8	9,200	8,900	<1.0	5.0
Chlorobenzene	<1.0	170	7.7	190	200	<1.0	100
Chloroform	<1.0	6,800	<1.0	1,400	1,500	<1.0	0.155
Methylene Chloride	<5.0	<250	<5.0	290	<500	<5.0	5.0
4-Methyl-2-pentanone	<10	640	11	1,300	1,200	<10	139
Toluene	<1.0	4,800	<1.0	3,300	3,300	<1.0	1,000

Notes: Samples collected September 28, 2009

All analytical results in $\mu\text{g/l}$ (micrograms per liter)

Volatile Organic Compound analysis conducted per EPA Test Method 8260B

MDEQ-TRG - Mississippi Department of Environmental Quality-Target Remedial Goal

< = below method detection limit (MDL)

Dup - field duplicate

Bold red italics indicates concentration exceeds MDEQ-TRG

¹ Method detection limit increased due to necessary sample dilution factor of 50

² Method detection limit increased due to necessary sample dilution factor of 100

TABLE 3
GROUNDWATER ANALYTICAL SUMMARY
SEMI-VOLATILE ORGANIC COMPOUNDS
HERCULES, INC.
HATTIESBURG, MISSISSIPPI
(Parameters reported above the method detection limit)

Parameter	Monitoring Well ID						MDEQ TRG
	MW-20²	MW-21³	MW-22⁴	MW-23⁵	MW-23⁵ Duplicate)	MW-24	
1,1-Biphenyl	<9.5	730	2,600	280	330	<9.4	304
Phenol	<9.5	140	4,600	180	250	<9.4	21,900
Naphthalene	<9.5	<95	<190	<95	<95	<9.4	6.20
1,4-Dioxane	<9.5	670	<190	850	1,100	<9.4	6.09
3 & 4 Methylphenol	<9.5	160	<190	490	610	<9.4	201 ¹

Notes: *Samples collected September 28, 2009*
All analytical results in µg/l (micrograms per liter)
Semi-Volatile Organic Compound analysis conducted per EPA Test Method 8270C
MDEQ-TRG – Mississippi Department of Environmental Quality-Target Remedial Goal
< = below method detection limit
Bold red italics indicates concentration exceeds MDEQ-TRG
¹ *Combined value for 3-Methylphenol (m-Cresol) and 4-Methylphenol (p-Cresol) TRGs*
² *Method detection limit increased due to necessary sample dilution factor of 2*
³ *Method detection limit increased due to necessary sample dilution factor of 10*
⁴ *Method detection limit increased due to necessary sample dilution factor of 20 & 25*
⁵ *Method detection limit increased due to necessary sample dilution factor of 10*

TABLE 4
GROUNDWATER ANALYTICAL SUMMARY
METALS
HERCULES, INC.
HATTIESBURG, MISSISSIPPI
(Parameters reported above the method detection limit)

Parameter	Monitoring Well ID						MDEQ TRG
	MW-20	MW-21	MW-22	MW-23	MW-23 Dup	MW-24	
Arsenic	<20	<20	<20	26	27	<20	5,000
Barium	84	65	130	51	52	280	2,000

Notes: Samples collected September 28, 2009

All analytical results in $\mu\text{g/l}$ (micrograms per liter)

Metals analysis conducted per EPA Test Method 6010B & 7470A

MDEQ-TRG – Mississippi Department of Environmental Quality-Target Remedial Goal

< = below method detection limit

TABLE 5
GROUNDWATER ANALYTICAL SUMMARY
DELNAV
HERCULES, INC.
HATTIESBURG, MISSISSIPPI
(Parameters reported above the Practical Quantitation Limit)

Parameter	Monitoring Well ID						MDEQ TRG
	MW-20	MW-21	MW-22	MW-23	MW-23 DUP	MW-24	
Dioxenethion	<0.40	185	<0.40	<0.40	202	<0.40	---
Dioxathion (cis)	<0.40	4.0	<0.40	<0.40	21.1	<0.40	---
Dioxathion (trans)	<0.40	8.6	<0.40	<0.40	19.4	<0.40	---
Total Dioxathion ¹	<0.80	12.6	<0.80	<0.80	40.5	<0.80	54.8

Notes:

- Samples collected September 28, 2009*
- All analytical results in µg/l (micrograms per liter)*
- Delnav analysis conducted per EPA Test Method 3510C (modified)*
- MDEQ-TRG – Mississippi Department of Environmental Quality-Target Remedial Goal*
- < = below the Practical Quantitation Limit (PQL)*
- = not applicable*
- Bold red italics indicates concentration exceeds MDEQ-TRG*
- ¹ Combined number for dioxathion (cis), and dioxathion (trans)*

TABLE 6
GROUNDWATER ANALYTICAL QA/QC SUMMARY
HERCULES, INC.
HATTIESBURG, MISSISSIPPI

Parameter	Rinsate Blank	Regular Sample MW-23	Duplicate Sample MW-23	Relative percent Difference
Acetone	<25	1600	<2500	NA
Benzene	<1.0	9200	8900	3.31
Chlorobenzene	<1.0	190	200	5.13
Chloroform	<1.0	1400	1500	6.90
Methylene chloride	<5.0	290	<500	NA
4-methyl-2-pentanone (MIBK)	<10	1300	1200	8.00
Toluene	<1.0	3300	3300	0.00
1,1-biphenyl	<9.4	260	330	23.7
1,4-dioxane	<9.4	790	990	22.5
3- & 4-methylphenol	<9.4	490	610	21.8
Phenol	<9.4	180	250	32.6
Arsenic	<20	26	27	3.77
Barium	11	51	52	1.94
Dioxenethion	<0.400	132	202	41.9
cis-Dioxathion	<0.400	17.6	21.1	18.1
trans-Dioxathion	<0.400	20.6	19.4	6.00

Notes: All concentrations are ug/l.

Rinsate samples were collected by rinsing deionized water through sample tubing.

Duplicate sample was diluted during analysis 100X.

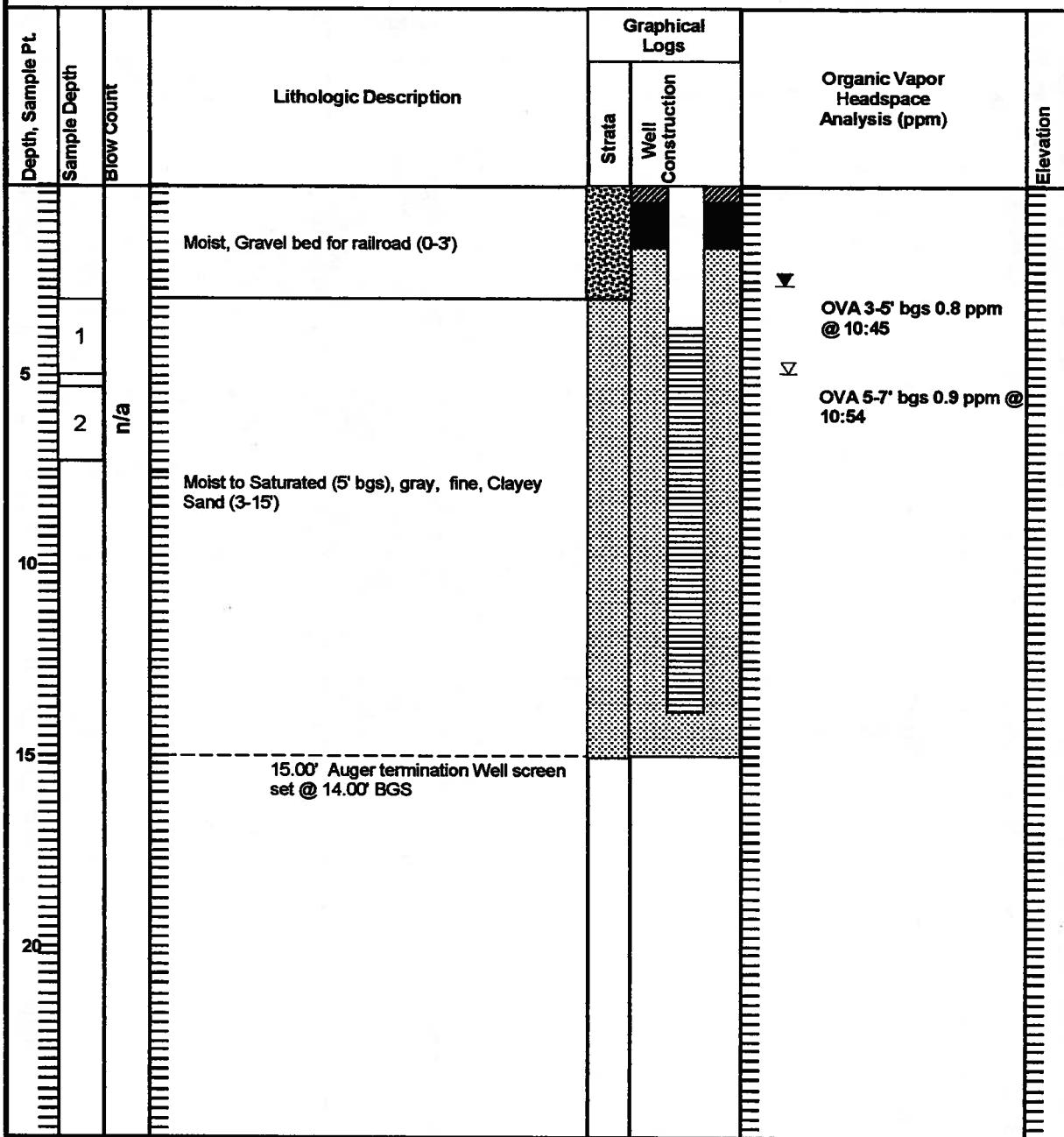
APPENDICES

APPENDIX A

GEOLOGIC BORING LOGS AND MONITORING WELL DIAGRAMS

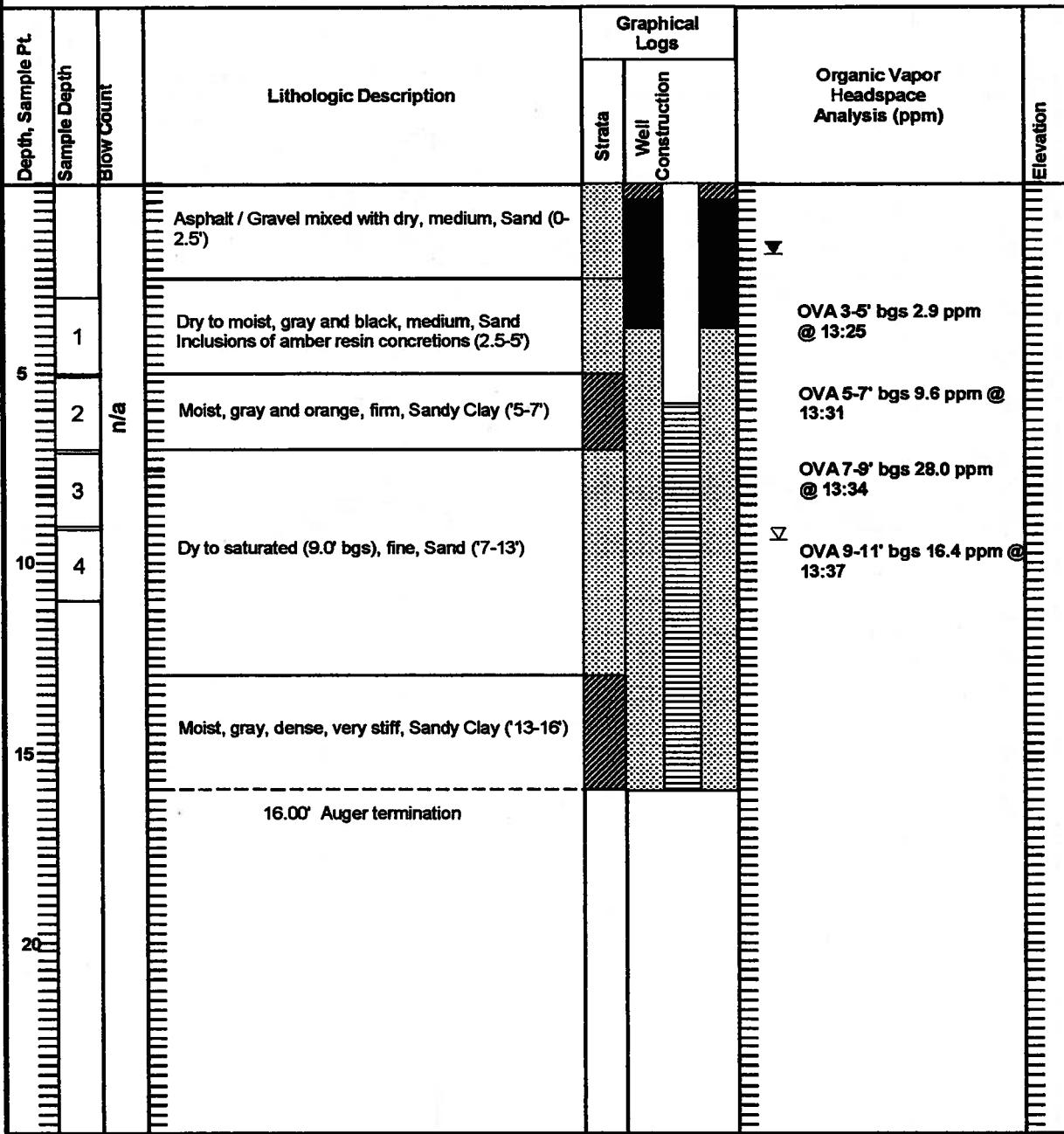
Sheet: 1 of 1

Project: Hercules Chemical	Well/Boring No.: B-20 / MW-20
Project No.: HER 42029205	Date(s): 9/15/2009 Logged By: Brent Eanes
Well/Boring Location: West side of Impoundment basin between rail road tracks	
Drilling Method: Hollow Stem Auger	Drilling Contractor: Singley Environmental
Depth to Groundwater: 5.95	Date: 9/28/2009 Reference: Below Top-of-casing
Elevations - Ground Surface: 168.62	Inner Casing: NA Reference: Top-of-casing
Water Table: 162.67	Date: 9/28/2009 Reference: Above MSL
Remarks: Stick up surface completions	Mean Sea Level (MSL)



Sheet 1 of 1

Project:	Hercules Chemical	Well/Boring No.:	B-21 / MW-21
Project No.:	HER 42029205	Date(s):	9/15/2009
Well/Boring Location:	North side of impoundment basin between Minerva St and raised pipes.		
Drilling Method:	Hollow Stem Auger	Drilling Contractor:	Singley Environmental
Depth to Groundwater:	2.28	Date:	9/28/2009
Elevations - Ground Surface:	163.66	Inner Casing:	NA
Water Table:	161.38	Date:	9/28/2009
Remarks:	Flush mount surface completions Mean Sea Level (MSL)		

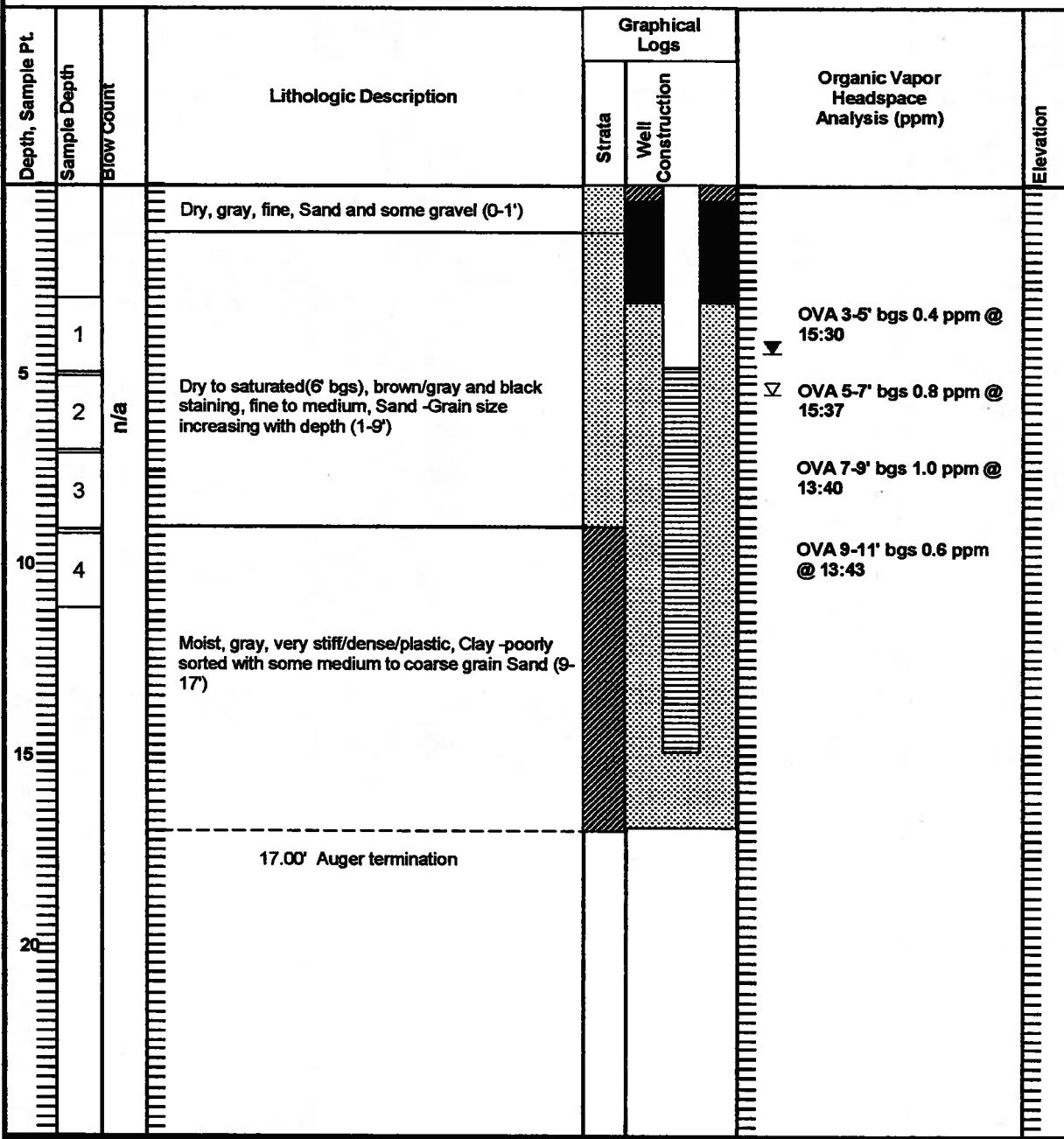


Eco-Systems, Inc. 
Consultants, Engineers and Scientists

Boring Log

Sheet 1 of 1

Project: Hercules Chemical	Well/Boring No.: B-22 / MW-22
Project No.: HER 42029205	Date(s): 9/15/2009 Logged By: Brent Eanes
Well/Boring Location: South side of impoundment basin and south edge of pavement	
Drilling Method: Hollow Stem Auger	Drilling Contractor: Singley Environmental
Depth to Groundwater: 6.08	Date: 9/28/2009 Reference: Below Top-of-casing
Elevations - Ground Surface: 167.62	Inner Casing: NA Reference: Top-of-casing
Water Table: 161.54	Date: 9/28/2009 Reference: Above MSL
Remarks: Stick up surface completions	Mean Sea Level (MSL)

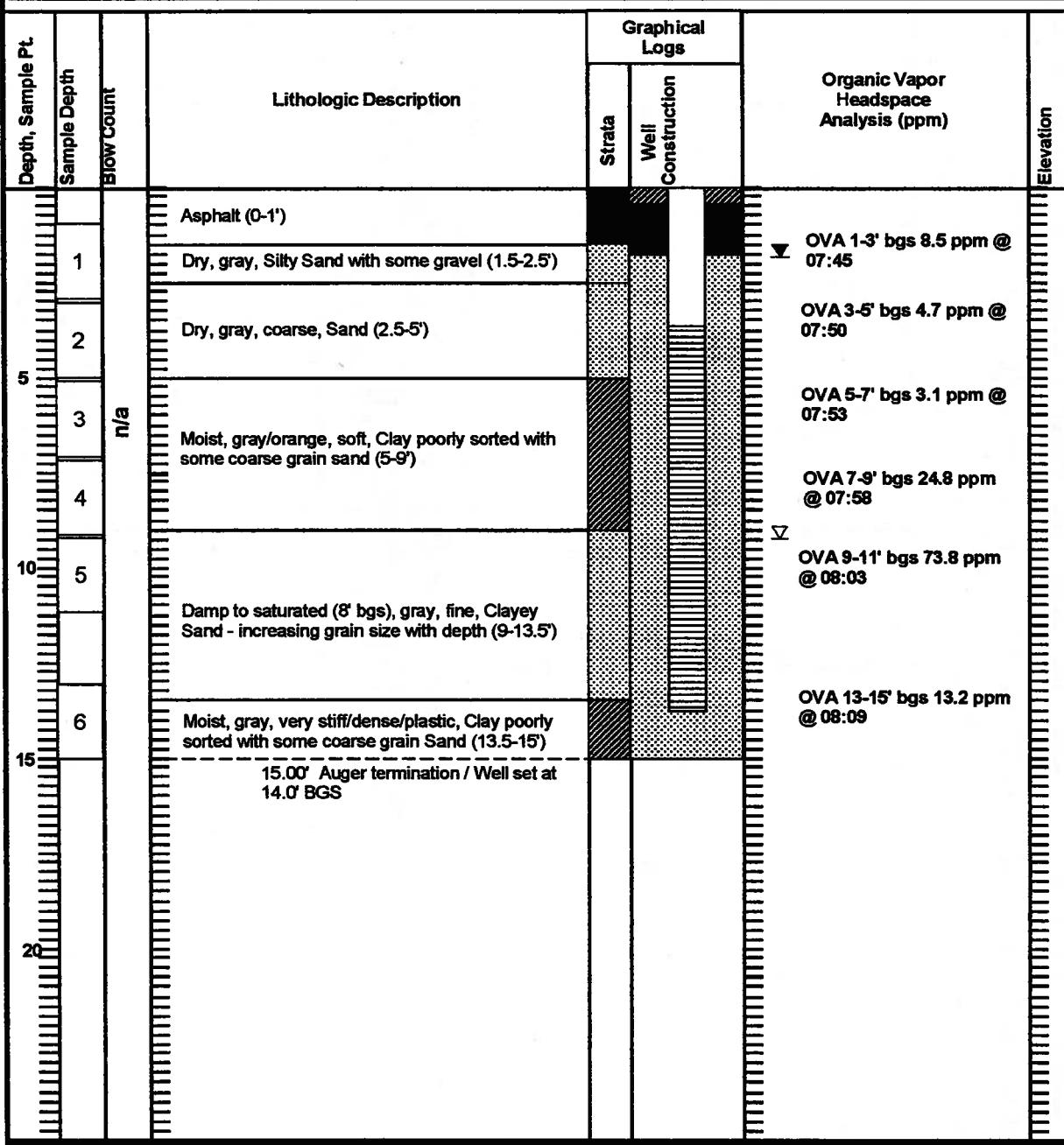


Note: Not all portions of this form are applicable to all projects

091

Sheet: 1 of 1

Project: Hercules Chemical	Well/Boring No.: B-23 / MW-23
Project No.: HER 42029205	Date(s): 9/16/2009 Logged By: Brent Eanes
Well/Boring Location: East side of impoundment basin between fence and IB but east of pavement	
Drilling Method: Hollow Stem Auger	Drilling Contractor: Singley Environmental
Depth to Groundwater: 2.96	Date: 9/28/2009 Reference: Below Top-of-casing
Elevations - Ground Surface: 162.68	Inner Casing: NA Reference: Top-of-casing
Water Table: 159.42	Date: 9/28/2009 Reference: Above MSL
Remarks: Flush mount surface completions	Mean Sea Level (MSL)

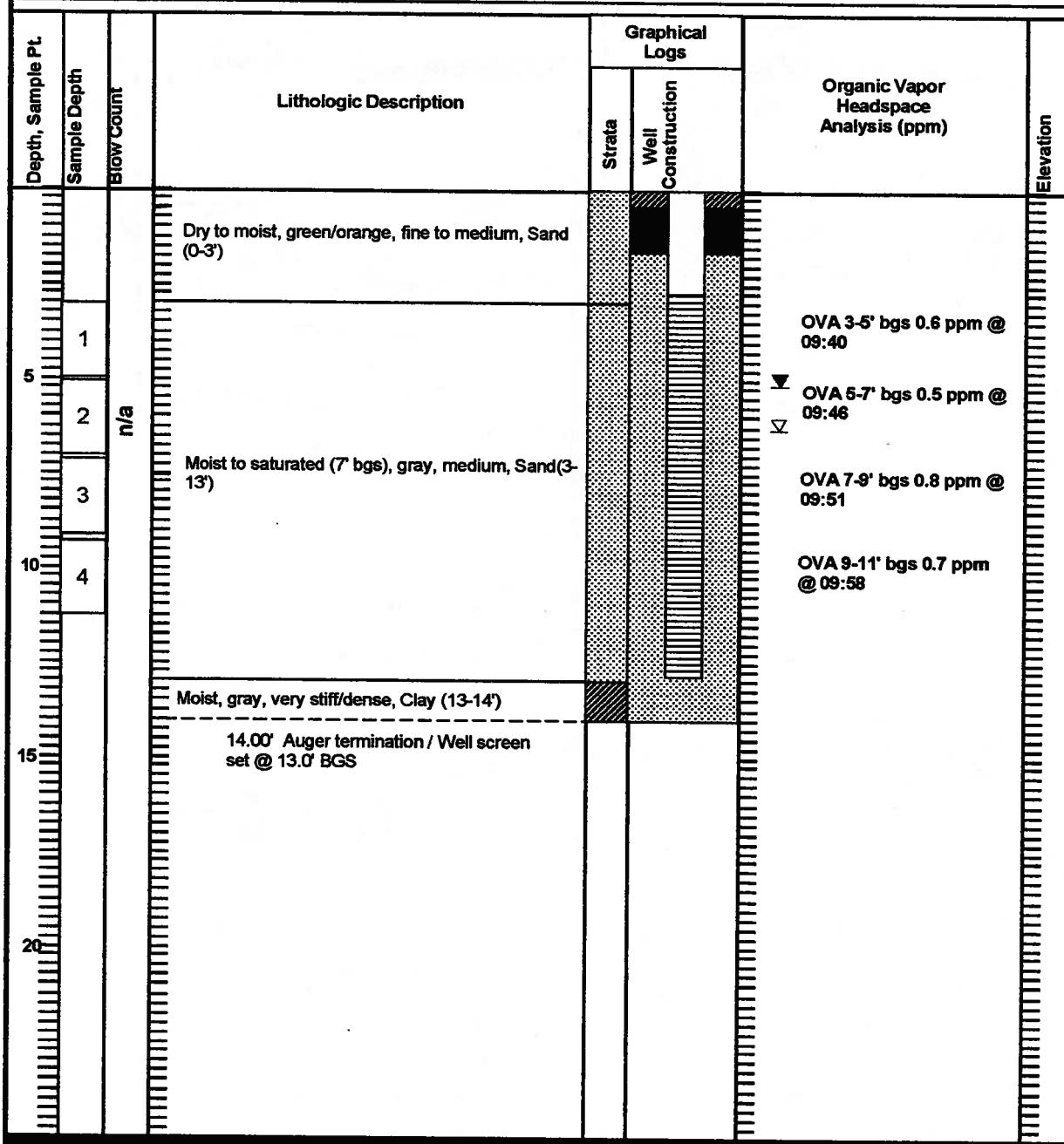




Boring Log

Sheet 1 of 1

Project: Hercules Chemical
Project No.: HER 42029205 Date(s): 9/16/2009 Logged By: Brent Eanes
Well/Boring Location: Across Providence Street in AST Fenced in Property
Drilling Method: Hollow Stem Auger Drilling Contractor: Singley Environmental
Depth to Groundwater: 8.00 Date: 9/28/2009 Reference: Below Top-of-casing
Elevations - Ground Surface: 164.98 Inner Casing: NA Reference: Top-of-casing
Water Table: 156.98 Date: 9/28/2009 Reference: Above MSL
Remarks: Stick up surface completions Mean Sea Level (MSL)



Note: That all portions of this form are applicable to all projects

Monitoring Well Schematic

Project: Hercules Chemical Impoundment Basin

Well/Boring No.: B-20 / MW-20

Project No.: HER 42029205

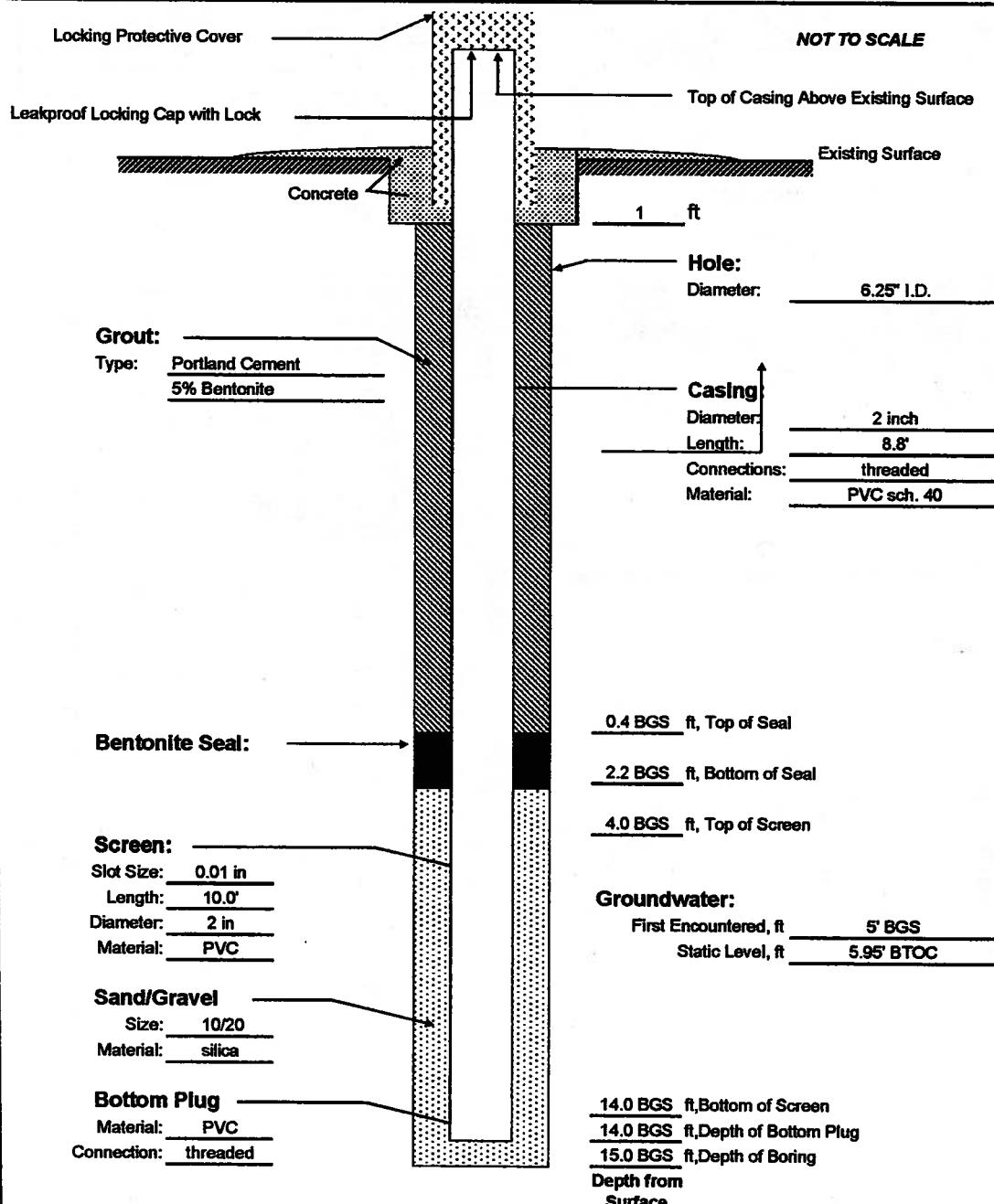
Drilling Supervisor: C. Brent Eanes

Boring Location: West side of I.B. between rail road tracks

Date(s): 15-Sep-09

Drilling Method: Hollow Stem Auger

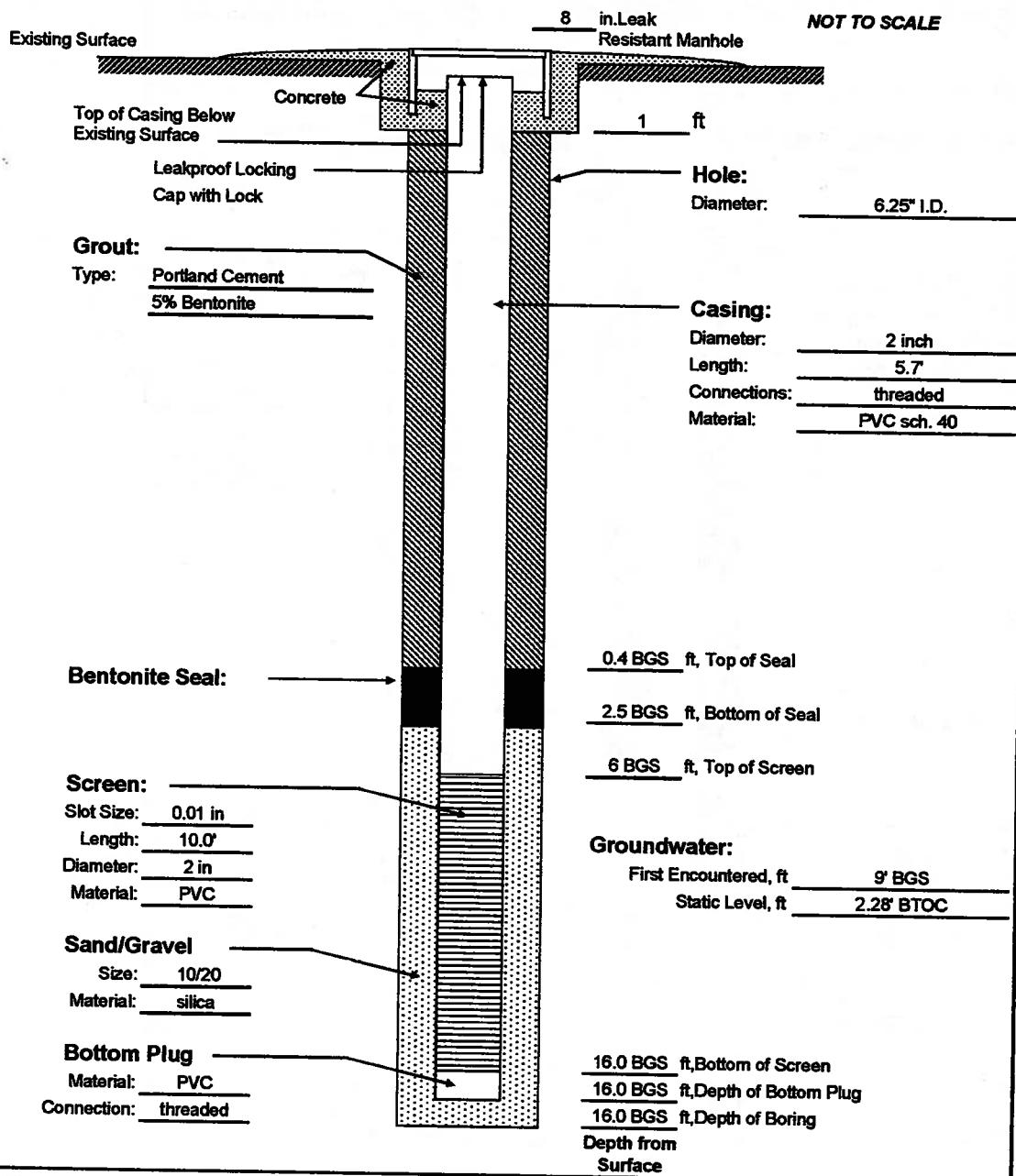
Drilling Contractor: Singley Environmental



Monitoring Well Schematic

Project: Hercules Chemical Impoundment Basin
 Project No.: HER 42029205
 Boring Location: North side of I.B. on side of Minerva St under pipes
 Drilling Method: Hollow Stem Auger

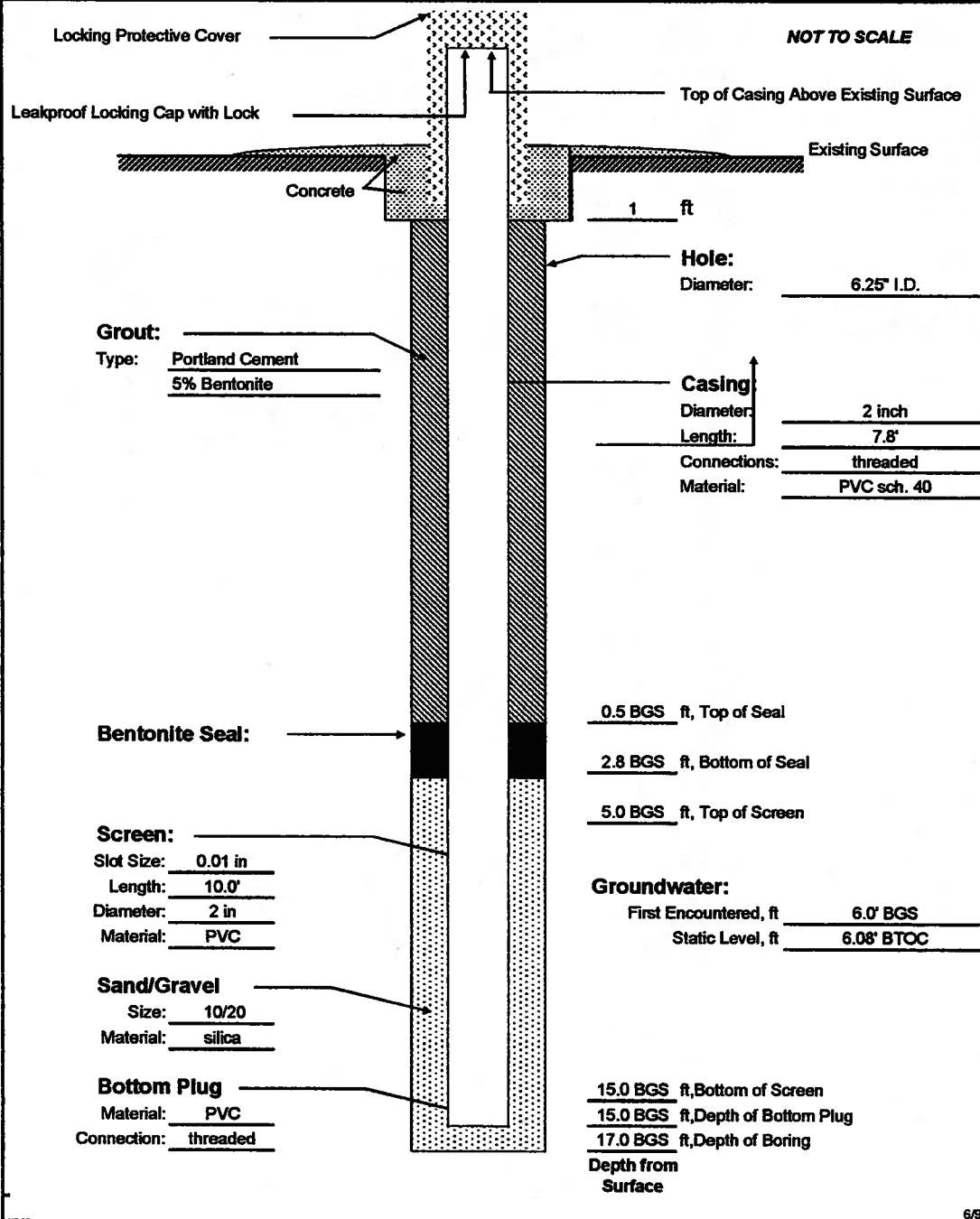
Well/Boring No.: B-21 / MW-21
 Drilling Supervisor: C. Brent Eanes
 Date(s): 15-Sep-09
 Drilling Contractor: Singley Environmental



Monitoring Well Schematic

Project: Hercules Chemical Impoundment Basin
 Project No.: HER 42029205
 Boring Location: South side of I.B. and south edge of pavement
 Drilling Method: Hollow Stem Auger

Well/Boring No.: B-22 / MW-22
 Drilling Supervisor: C. Brent Eanes
 Date(s): 15-Sep-09
 Drilling Contractor: Singley Environmental



Monitoring Well Schematic

Project: Hercules Chemical Impoundment Basin

Well/Boring No.: B-23 / MW-23

Project No.: HER 42029205

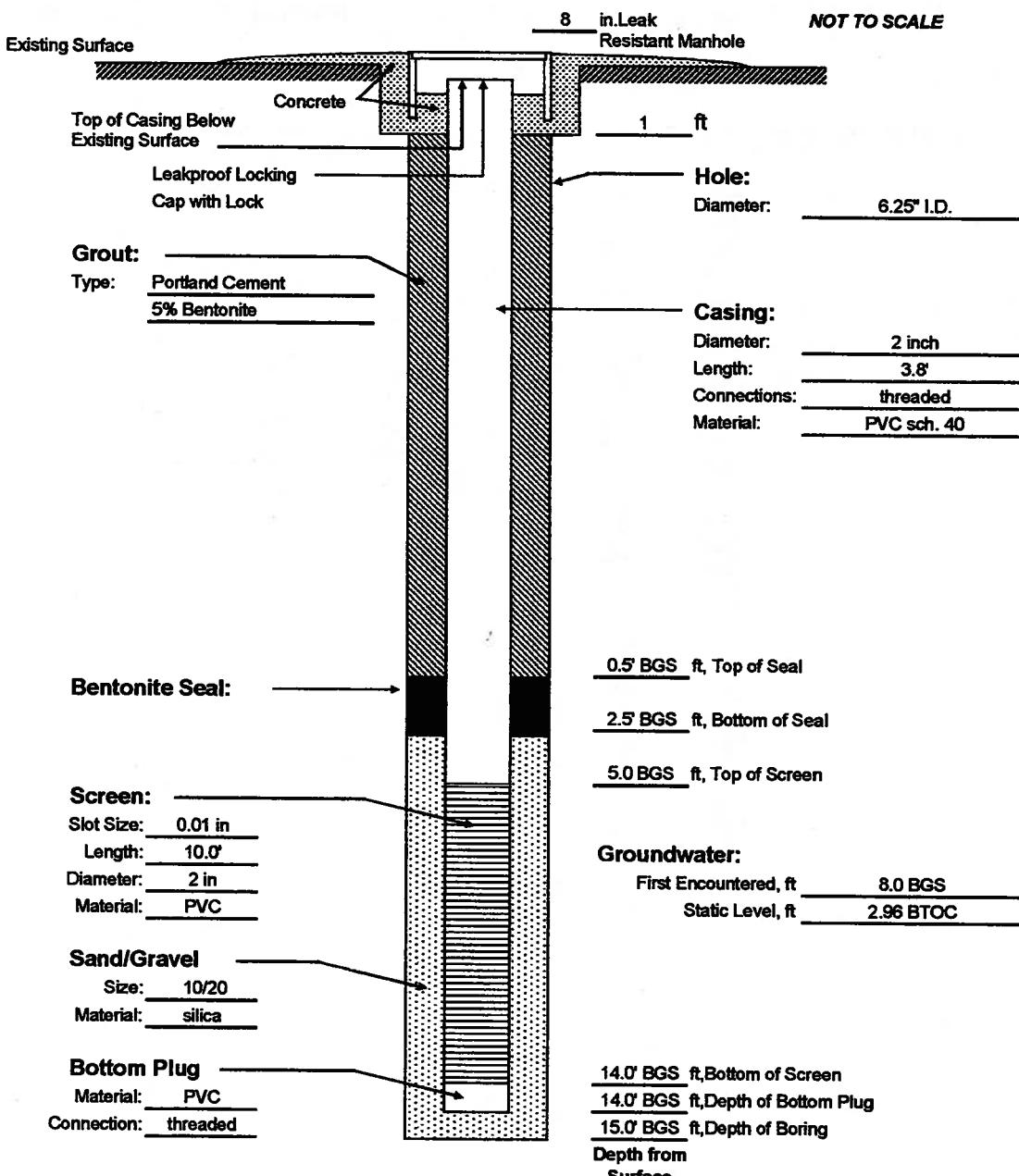
Drilling Supervisor: C. Brent Eanes

Boring Location: East side of I.B. between fence and IB

Date(s): 15-Sep-09

Drilling Method: Hollow Stem Auger

Drilling Contractor: Singley Environmental



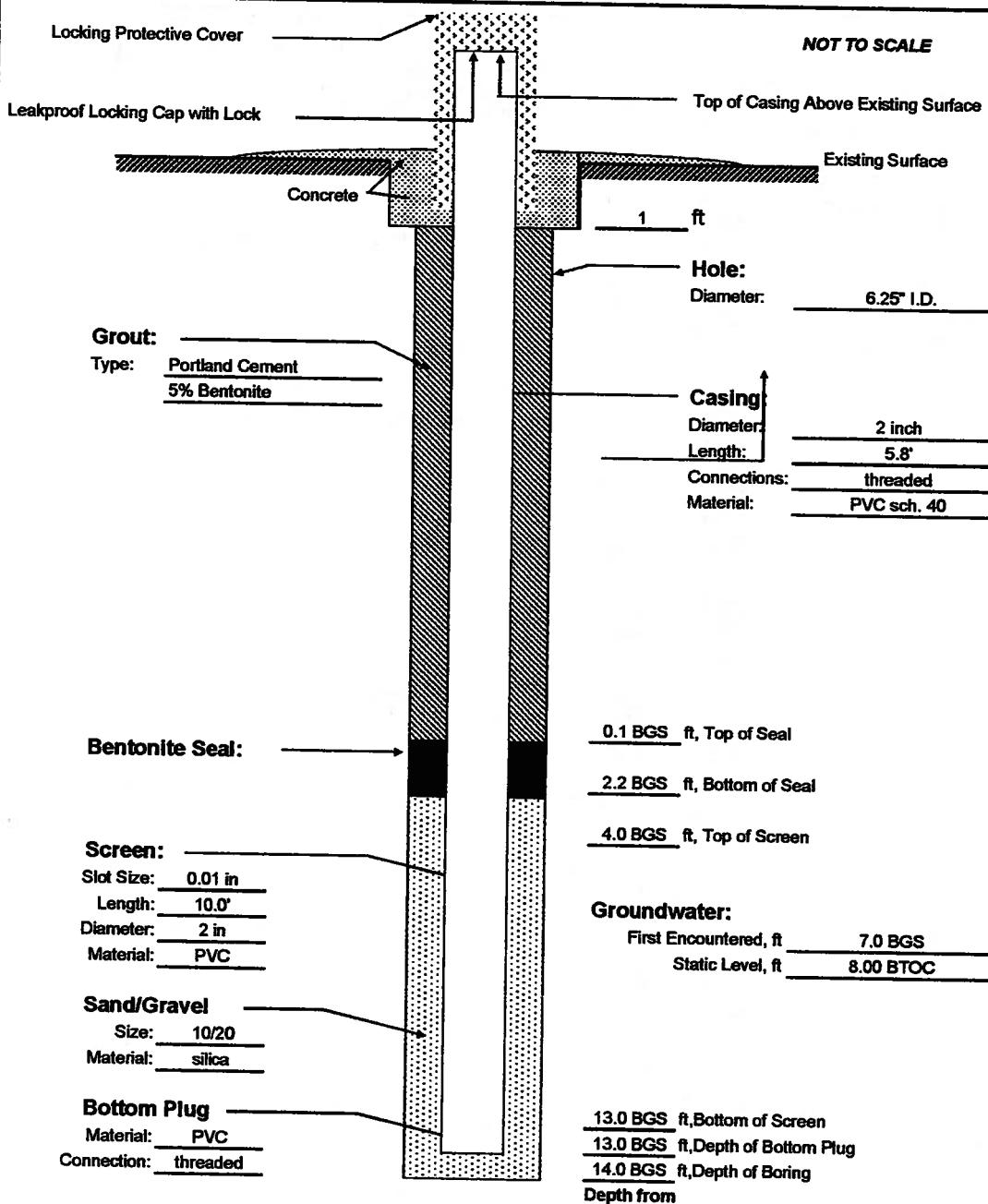
Comments:

Eco-Systems, Inc. 
Consultants. Engineers and Scientists

Monitoring Well Schematic

Project: Hercules Chemical Impoundment Basin
 Project No.: HER 42029205
 Boring Location: Across Providence Street in AST Fenced in Property
 Drilling Method: Hollow Stem Auger

Well/Boring No.: B-24 / MW-24
 Drilling Supervisor: C. Brent Eanes
 Date(s): 16-Sep-09
 Drilling Contractor: Singley Environmental



APPENDIX B

SAMPLE COLLECTION LOGS

Project Name: Hercules Chemical
Project Number: HER 12029205

Boring ID: MW-20
Site Location: Hattiesburg, Mississippi

Start Date: 9/28/09 Finish Date: 09/29/09
Sample Technician: C. Brent Eanes / Travis Beard
Purge/Sample Method: Low Flow/Low Stress with Peristaltic Pump
Well Diameter: 2"
T.O.C. Elev. AMSL 168.62
Total Depth of Well (ft) 14.00
Approximate Depth of Water Column
($h = TD$ of well - water level [TOC]): 8.05
Calculated Well Volume ($V = \pi D^2 h$): 1.32
($V = \text{vol in gal; } D = \text{well diam. in ft}$): 1.32
Groundwater Elevation AMSL 162.67

Water Level Measurements		
Date	Time	B.T.O.C.
9/28/2009	14:25	5.95
9/29/2009	6:52	6.20
9/29/2009	7:01	6.20
9/29/2009	7:07	6.20

WELL DEVELOPMENT/PURGING DATA

Sample Identification: MW-20

Weather Conditions During Sampling Clear, 58°F

Comments: Slight sheen present in purge water.

Signature:  **Date:** 10/9/2009

GROUNDWATER SAMPLE CONTAINERS			
Date	Time	Sample Container	Preservative
9/29/2009	7:20	3-40ml VOAs	HCl
9/29/2009	7:20	2-1 LAG (SVOC)	None
9/29/2009	7:20	2-250ml plastic	HNO3
9/29/2009	7:20	2-1 LAG Delnay®	None



groundwater Sample Collection Log

Page 2 of 5.

Project Name: Hercules Chemical
Project Number: HER 12029205

Boring ID: MW-21
Site Location: Hattiesburg, Mississippi

Start Date: 9/28/09 **Finish Date:** 09/29/09
Sample Technician: C. Brent Eanes / Travis Beard
Purge/Sample Method: Low Flow/Low Stress with Peristaltic Pump
Well Diameter: 2"
T.O.C. Elev. AMSL 163.66
Total Depth of Well (ft 16.00
Approximate Depth of Water Column
(h= TD of well - water level [TOC]): 13.72
Calculated Well Volume (V=6hd²)
(V = vol in gal; D = well diam. in ft): 2.25
Groundwater Elevation AMSL 161.38

Water Level Measurements		
Date	Time	B.T.O.C.
9/28/2009	14:40	2.28
9/29/2009	11:13	2.50
9/29/2009	11:26	2.72
9/29/2009	11:32	2.73
9/29/2009	11:37	2.74

WELL DEVELOPMENT/PURGING DATA

Sample Identification: MW-21

Weather Conditions During Sampling Clear. 74°F

Comments: Split samples with Mr. Willie McKercher of MDEQ for VOC, SVOC, RCRA Metals/Mercury. Sheen present in purge water.

Signature:  **Date:** 10/9/2009

GROUNDWATER SAMPLE CONTAINERS			
Date	Time	Sample Container	Preservative
9/29/2009	11:42	3-40ml VOAs	HCl
9/29/2009	11:42	2-1 LAG (SVOC)	None
9/29/2009	11:42	2-250ml plastic	HNO3
9/29/2009	11:42	2-1 LAG Delnav*	None

Project Name: Hercules Chemical
Project Number: HER 12029205

Boring ID: MW-22
Site Location: Hattiesburg, Mississippi

Start Date: 9/28/09 Finish Date: 09/29/09
Sample Technician: C. Brent Eanes / Travis Beard
Purge/Sample Method: Low Flow/Low Stress with Peristaltic Pump
Well Diameter: 2"
T.O.C. Elev. AMSL 167.62
Total Depth of Well (ft) 15.00
Approximate Depth of Water Column
(h= TD of well - water level [TOC]): 8.92
Calculated Well Volume (V=πhd²)
(V = vol in gal; D = well diam. in ft): 1.46
Groundwater Elevation AMSL 161.54

WELL DEVELOPMENT/PURGING DATA

Sample Identification: MW-22

Weather Conditions During Sampling Clear, 64°F

Comments:

Signature: **Date:** 10/9/2009

GROUNDWATER SAMPLE CONTAINERS			
Date	Time	Sample Container	Preservative
9/29/2009	8:23	3-40ml VOAs	HCl
9/29/2009	8:23	2-1 LAG (SVOC)	None
9/29/2009	8:23	2-250ml plastic	HNO3
9/29/2009	8:23	2-1 LAG Delnay®	None

Project Name: Hercules Chemical
Project Number: HER 12029205

Boring ID: MW-23
Site Location: Hattiesburg, Mississippi

Start Date: 9/28/09 **Finish Date:** 09/29/09
Sample Technician: C. Brent Eanes / Travis Beard
Purge/Sample Method: Low Flow/Low Stress with Peristaltic Pump
Well Diameter: 2"
T.O.C. Elev. AMSL 162.38
Total Depth of Well (ft 14.00
Approximate Depth of Water Column
(h= TD of well - water level [TOC]): 11.04
Calculated Well Volume (V=6hd²)
(V = vol in gal; D = well diam. in ft): 1.81
Groundwater Elevation AMSL 159.42

Water Level Measurements		
Date	Time	B.T.O.C.
9/28/2009	13:50	2.96
9/29/2009	9:04	3.37
9/29/2009	9:07	3.51
9/29/2009	9:13	3.71
9/29/2009	9:30	3.86
9/29/2009	9:43	3.93

WELL DEVELOPMENT/PURGING DATA

Sample Identification: MW-23

Weather Conditions During Sampling Clear. 68°F

Comments: Duplicate Sample Obtained

Signature: **Date:** 10/9/2009

GROUNDWATER SAMPLE CONTAINERS			
Date	Time	Sample Container	Preservative
9/29/2009	9:45	3-40ml VOAs	HCl
9/29/2009	9:45	2-1 LAG (SVOC)	None
9/29/2009	9:45	2-250ml plastic	HNO3
9/29/2009	9:45	2-1 LAG Delnay*	None



Groundwater Sample Collection Log

Project Name: Hercules Chemical
Project Number: HER 12029205

Boring ID: MW-24
Site Location: Hattiesburg, Mississippi

Start Date: 9/28/09 Finish Date: 09/29/09
Sample Technician: C. Brent Eunes / Travis Beard
Purge/Sample Method: Low Flow/Low Stress with Peristaltic Pump
Well Diameter: 2"
T.O.C. Elev. AMSL 164.98
Total Depth of Well (R 13.00)
Approximate Depth of Water Column
(h= TD of well - water level [TOC]): 5.00
Calculated Well Volume (V=6hd²)
(V = vol in gal; D = well diam. in ft): 0.82
Groundwater Elevation AMSL 156.98

Water Level Measurements		
Date	Time	B.T.O.C.
9/28/2009	15:20	8.00
9/28/2009	15:30	8.48
9/28/2009	15:40	8.70
9/28/2009	15:50	9.20
9/28/2009	16:12	9.24

Sample Identification: MW-24 / MS / MSD / RB

Weather Conditions During Sampling Clear, 92°F

Comments: Rinsate Blank (RB) taken at 17:45.

Signature:  **Date:** 10/9/2009

GROUNDWATER SAMPLE CONTAINERS			
Date	Time	Sample Container	Preservative
9/28/2009	16:05	3-40ml VOAs	HCl
9/28/2009	16:05	2-1 LAG (SVOC)	None
9/28/2009	16:05	2-250ml plastic	HNO3
9/28/2009	16:05	2-1 LAG Delnag®	None

APPENDIX C
LABORATORY DATA REPORTS

ANALYTICAL REPORT

Job Number: 680-51170-1

Job Description: Hercules Hattiesburg I.B. 9/28-29/09

For:
Ashland Inc.
500 Hercules Road
Wilmington, DE 19894
Attention: Timothy Hassett



Approved for release.
Lidya Gulizia
Project Manager I
10/26/2009 1:15 PM

Lidya Gulizia
Project Manager I
lidya.gulizia@testamericainc.com
10/26/2009

cc: Caleb Dana
Mr. Charlie Jordan
Mr. Chris Waters

The test results in this report meet NELAP requirements for parameters for which accreditation is required or available. Any exceptions to the NELAP requirements are noted. Results pertain only to samples listed in this report. This report may not be reproduced, except in full, without the written approval of the laboratory. Questions should be directed to the person who signed this report.

Savannah Certifications and ID #'s: A2LA: 0399.01; AL: 41450; ARDEQ: 88-0692; ARDOH; CA: 03217CA; CO; CT: PH0161; DE; FL: E87052; GA: 803; Guam; HI; IL: 200022; IN; IA: 353; KS: E-10322; KY EPPC: 90084; KY UST; LA DEQ: 30690; LA DHH: LA080008; ME: 2008022; MD: 250; MA: M-GA006; MI: 9925; MS; NFESC: 249; NV: GA00006; NJ: GA769; NM; NY: 10842; NC DWQ: 269; NC DHHS: 13701; PA: 68-00474; PR: GA00006; RI: LAO00244; SC: 98001001; TN: TN0296; TX: T104704185; USEPA: GA00006; VT: VT-87052; VA: 00302; WA; WV DEP: 094; WV DHHR: 9950 C; WI DNR: 999819810; WY/EPAR8: 8TMS-Q

TestAmerica Laboratories, Inc.
TestAmerica Savannah 5102 LaRoche Avenue, Savannah, GA 31404
Tel (912) 354-7858 Fax (912) 352-0165 www.testamericainc.com



**Job Narrative
680-51170-1 Final Report**

 **Receipt**

All samples were received in good condition within temperature requirements.

GC/MS VOA

Method(s) 8260B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for batch 149463 were outside control limits for the following analyte: carbon disulfide.

Method(s) 8260B: The laboratory control sample (LCS) for batch 149463 exceeded control limits for the following analyte: carbon disulfide.

Method(s) 8260B: The laboratory control sample duplicate (LCSD) for batch 149463 exceeded control limits for the following analyte: carbon disulfide.

No other analytical or quality issues were noted.

GC/MS Semi VOA

Method(s) 3520C, 8270C: The following samples were diluted due to the nature of the sample matrix and abundance of target analytes: Dup (680-51170-6), MW-20 (680-51170-3), MW-21 (680-51170-7), MW-22 (680-51170-4), MW-23 (680-51170-5). As such, surrogate recoveries are not reported and elevated reporting limits (RLs) are provided.

Method(s) 8270C: Multiple spiking analytes were outside control limits in the laboratory control sample (LCS), matrix spike (MS) and matrix spike duplicate (MSD) in batch 149426. All associated samples were re-extracted outside holding times and both sets of results have been reported.

Method(s) 8270C: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and RPD's for batch 150728 were outside control limits. The associated laboratory control sample (LCS) recovery met acceptance criteria.

 Method(s) 8270C: The following analytes have been identified as poor performers: The following analytes have been identified, in the reference method and/or via historical data, to be poor and/or erratic performers: Famphur, 1,4-Naphthaquinone, Methane sulfonate, Benzaldehyde, 1-naphthylamine, 2-naphthylamine, p-Dimethylamino azobenzene, p-phenylenediamine, a,a-dimethylphenethylamine, Methapyriline, 2-picoline (2-methylpyridine), 3,3'-dimethylbenzidine, 3,3'-dichlorobenzidine, Benzidine, Benzaldehyde, Benzoic acid, Dinoseb, Hexachlorophene, Hexachlorocyclopentadiene, o,o,o-triethylphosphoro-thioate. These compounds were not included in the LCS/LCSD/MS/MSD marginal exceedance count, as outlined in SOP SA-QA-17: Evaluation of Batch QC Data, provided they are qualitatively detected.

No other analytical or quality issues were noted.

GC Semi VOA

Method(s) 8081A_8082: Two surrogates are used for this analysis. The laboratory's SOP allows one of these surrogates to be outside acceptance criteria without performing re-extraction/re-analysis. The following sample(s) contained an allowable number of surrogate compounds outside limits: MW-20 (680-51170-3), MW-22 (680-51170-4). These results have been reported and qualified.

No other analytical or quality issues were noted.

Metals

No analytical or quality issues were noted.

Comments

No additional comments.

METHOD SUMMARY

Client: Ashland Inc.

Job Number: 680-51170-1

Description	Lab Location	Method	Preparation Method
Matrix: Water			
Volatile Organic Compounds (GC/MS) Purge and Trap	TAL SAV TAL SAV	SW846 8260B SW846 5030B	
Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS) Liquid-Liquid Extraction (Continuous)	TAL SAV	SW846 8270C	SW846 3520C
Organochlorine Pesticides & PCBs (GC) Liquid-Liquid Extraction (Continuous)	TAL SAV TAL SAV	SW846 8081A_8082 SW846 3520C	
Metals (ICP) Preparation, Total Metals	TAL SAV TAL SAV	SW846 6010B SW846 3010A	
Mercury (CVAA) Preparation, Mercury	TAL SAV TAL SAV	SW846 7470A SW846 7470A	

Lab References:

TAL SAV = TestAmerica Savannah

Method References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

METHOD / ANALYST SUMMARY

Client: Ashland Inc.

Job Number: 680-51170-1

Method	Analyst	Analyst ID
SW846 8260B	Lanier, Carolyn	CL
SW846 8270C	Chamberlain, Kim	KAC
SW846 8270C	Haynes, Carion	CRH
SW846 8270C	Nguyen, Thuong	TN
SW846 8081A_8082	Kellar, Joshua	JK
SW846 6010B	Bland, Brian	BCB
SW846 7470A	Hardy, Donnetta	DH

SAMPLE SUMMARY

Client: Ashland Inc.

Job Number: 680-51170-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
680-51170-1	MW-24	Water	09/28/2009 1605	09/30/2009 0853
680-51170-1MS	MW-24 MS	Water	09/28/2009 1605	09/30/2009 0853
680-51170-1MSD	MW-24 MSD	Water	09/28/2009 1605	09/30/2009 0853
680-51170-2RB	RB	Water	09/28/2009 1745	09/30/2009 0853
680-51170-3	MW-20	Water	09/29/2009 0720	09/30/2009 0853
680-51170-4	MW-22	Water	09/29/2009 0823	09/30/2009 0853
680-51170-5	MW-23	Water	09/29/2009 0945	09/30/2009 0853
680-51170-6FD	Dup	Water	09/29/2009 0000	09/30/2009 0853
680-51170-7	MW-21	Water	09/29/2009 1142	09/30/2009 0853
680-51170-8TB	Trip Blank	Water	09/29/2009 0000	09/30/2009 0853
680-51170-9TB	Trip Blank	Water	09/29/2009 0000	09/30/2009 0853
680-51170-10TB	Trip Blank	Water	09/29/2009 0000	09/30/2009 0853

SAMPLE RESULTS

Analytical Data

Client: Ashland Inc.

Job Number: 680-51170-1

Client Sample ID: MW-24

Lab Sample ID: 680-51170-1

Client Matrix: Water

Date Sampled: 09/28/2009 1605

Date Received: 09/30/2009 0853

8260B Volatile Organic Compounds (GC/MS)

Method:	8260B	Analysis Batch:	680-149463	Instrument ID:	MSA
Preparation:	5030B			Lab File ID:	a1068.d
Dilution:	1.0			Initial Weight/Volume:	5 mL
Date Analyzed:	10/01/2009 1542			Final Weight/Volume:	5 mL
Date Prepared:	10/01/2009 1542				

Analyte	Result (ug/L)	Qualifier	RL
Acetone	<25		25
Acetonitrile	<40		40
Acrolein	<20		20
Acrylonitrile	<20		20
Benzene	<1.0		1.0
Dichlorobromomethane	<1.0		1.0
Bromoform	<1.0		1.0
Bromomethane	<1.0		1.0
2-Butanone (MEK)	<10		10
Carbon disulfide	<2.0	*	2.0
Carbon tetrachloride	<1.0		1.0
Chlorobenzene	<1.0		1.0
2-Chloro-1,3-butadiene	<1.0		1.0
Chloroethane	<1.0		1.0
Chloroform	<1.0		1.0
Chloromethane	<1.0		1.0
3-Chloro-1-propene	<1.0		1.0
Chlorodibromomethane	<1.0		1.0
1,2-Dibromo-3-Chloropropane	<1.0		1.0
Ethylene Dibromide	<1.0		1.0
Dibromomethane	<1.0		1.0
trans-1,4-Dichloro-2-butene	<2.0		2.0
Dichlorodifluoromethane	<1.0		1.0
1,1-Dichloroethane	<1.0		1.0
1,2-Dichloroethane	<1.0		1.0
cis-1,2-Dichloroethene	<1.0		1.0
trans-1,2-Dichloroethene	<1.0		1.0
1,1-Dichloroethene	<1.0		1.0
1,2-Dichloropropane	<1.0		1.0
cis-1,3-Dichloropropene	<1.0		1.0
trans-1,3-Dichloropropene	<1.0		1.0
Ethylbenzene	<1.0		1.0
Ethyl methacrylate	<1.0		1.0
2-Hexanone	<10		10
Iodomethane	<5.0		5.0
Isobutyl alcohol	<40		40
Methacrylonitrile	<20		20
Methylene Chloride	<5.0		5.0
Methyl methacrylate	<1.0		1.0
4-Methyl-2-pentanone (MIBK)	<10		10
Pentachloroethane	<5.0		5.0
Propionitrile	<20		20
Styrene	<1.0		1.0
1,1,1,2-Tetrachloroethane	<1.0		1.0
1,1,2,2-Tetrachloroethane	<1.0		1.0
Tetrachloroethene	<1.0		1.0

Analytical Data

Client: Ashland Inc.

Job Number: 680-51170-1

Client Sample ID: MW-24

Lab Sample ID: 680-51170-1

Client Matrix: Water

Date Sampled: 09/28/2009 1605

Date Received: 09/30/2009 0853

8260B Volatile Organic Compounds (GC/MS)

Method:	8260B	Analysis Batch:	680-149463	Instrument ID:	MSA
Preparation:	5030B			Lab File ID:	a1068.d
Dilution:	1.0			Initial Weight/Volume:	5 mL
Date Analyzed:	10/01/2009 1542			Final Weight/Volume:	5 mL
Date Prepared:	10/01/2009 1542				

Analyte	Result (ug/L)	Qualifier	RL
Toluene	<1.0		1.0
1,1,1-Trichloroethane	<1.0		1.0
1,1,2-Trichloroethane	<1.0		1.0
Trichloroethene	<1.0		1.0
Trichlorofluoromethane	<1.0		1.0
1,2,3-Trichloropropane	<1.0		1.0
Vinyl acetate	<2.0		2.0
Vinyl chloride	<1.0		1.0
Xylenes, Total	<2.0		2.0

Surrogate	%Rec	Qualifier	Acceptance Limits
4-Bromofluorobenzene	100		75 - 120
Dibromofluoromethane	105		75 - 121
Toluene-d8 (Surf)	99		75 - 120

Analytical Data

Client: Ashland Inc.

Job Number: 680-51170-1

Client Sample ID: RB

Lab Sample ID: 680-51170-2RB

Client Matrix: Water

Date Sampled: 09/28/2009 1745

Date Received: 09/30/2009 0853

8260B Volatile Organic Compounds (GC/MS)

Method:	8260B	Analysis Batch:	680-149463	Instrument ID:	MSA
Preparation:	5030B			Lab File ID:	a1067.d
Dilution:	1.0			Initial Weight/Volume:	5 mL
Date Analyzed:	10/01/2009 1522			Final Weight/Volume:	5 mL
Date Prepared:	10/01/2009 1522				

Analyte	Result (ug/L)	Qualifier	RL
Acetone	<25		25
Acetonitrile	<40		40
Acrolein	<20		20
Acrylonitrile	<20		20
Benzene	<1.0		1.0
Dichlorobromomethane	<1.0		1.0
Bromoform	<1.0		1.0
Bromomethane	<1.0		1.0
2-Butanone (MEK)	<10		10
Carbon disulfide	<2.0	*	2.0
Carbon tetrachloride	<1.0		1.0
Chlorobenzene	<1.0		1.0
2-Chloro-1,3-butadiene	<1.0		1.0
Chloroethane	<1.0		1.0
Chloroform	<1.0		1.0
Chloromethane	<1.0		1.0
3-Chloro-1-propene	<1.0		1.0
Chlorodibromomethane	<1.0		1.0
1,2-Dibromo-3-Chloropropane	<1.0		1.0
Ethylene Dibromide	<1.0		1.0
Dibromomethane	<1.0		1.0
trans-1,4-Dichloro-2-butene	<2.0		2.0
Dichlorodifluoromethane	<1.0		1.0
1,1-Dichloroethane	<1.0		1.0
1,2-Dichloroethane	<1.0		1.0
cis-1,2-Dichloroethene	<1.0		1.0
trans-1,2-Dichloroethene	<1.0		1.0
1,1-Dichloroethene	<1.0		1.0
1,2-Dichloropropane	<1.0		1.0
cis-1,3-Dichloropropene	<1.0		1.0
trans-1,3-Dichloropropene	<1.0		1.0
Ethylbenzene	<1.0		1.0
Ethyl methacrylate	<1.0		1.0
2-Hexanone	<10		10
Iodomethane	<5.0		5.0
Isobutyl alcohol	<40		40
Methacrylonitrile	<20		20
Methylene Chloride	<5.0		5.0
Methyl methacrylate	<1.0		1.0
4-Methyl-2-pentanone (MIBK)	<10		10
Pentachloroethane	<5.0		5.0
Propionitrile	<20		20
Styrene	<1.0		1.0
1,1,1,2-Tetrachloroethane	<1.0		1.0
1,1,2,2-Tetrachloroethane	<1.0		1.0
Tetrachloroethene	<1.0		1.0

Analytical Data

Client: Ashland Inc.

Job Number: 680-51170-1

Client Sample ID: RB

Lab Sample ID: 680-51170-2RB

Client Matrix: Water

Date Sampled: 09/28/2009 1745

Date Received: 09/30/2009 0853

8260B Volatile Organic Compounds (GC/MS)

Method:	8260B	Analysis Batch:	680-149463	Instrument ID:	MSA
Preparation:	5030B			Lab File ID:	a1067.d
Dilution:	1.0			Initial Weight/Volume:	5 mL
Date Analyzed:	10/01/2009 1522			Final Weight/Volume:	5 mL
Date Prepared:	10/01/2009 1522				

Analyte	Result (ug/L)	Qualifier	RL
Toluene	<1.0		1.0
1,1,1-Trichloroethane	<1.0		1.0
1,1,2-Trichloroethane	<1.0		1.0
Trichloroethylene	<1.0		1.0
Trichlorofluoromethane	<1.0		1.0
1,2,3-Trichloropropane	<1.0		1.0
Vinyl acetate	<2.0		2.0
Vinyl chloride	<1.0		1.0
Xylenes, Total	<2.0		2.0

Surrogate	%Rec	Qualifier	Acceptance Limits
4-Bromofluorobenzene	99		75 - 120
Dibromofluoromethane	104		75 - 121
Toluene-d8 (Surrogate)	102		75 - 120

Analytical Data

Client: Ashland Inc.

Job Number: 680-51170-1

Client Sample ID: MW-20

Lab Sample ID: 680-51170-3

Client Matrix: Water

Date Sampled: 09/29/2009 0720

Date Received: 09/30/2009 0853

8260B Volatile Organic Compounds (GC/MS)

Method:	8260B	Analysis Batch:	680-149463	Instrument ID:	MSA
Preparation:	5030B			Lab File ID:	a1069.d
Dilution:	1.0			Initial Weight/Volume:	5 mL
Date Analyzed:	10/01/2009 1601			Final Weight/Volume:	5 mL
Date Prepared:	10/01/2009 1601				

Analyte	Result (ug/L)	Qualifier	RL
Acetone	<25		25
Acetonitrile	<40		40
Acrolein	<20		20
Acrylonitrile	<20		20
Benzene	<1.0		1.0
Dichlorobromomethane	<1.0		1.0
Bromoform	<1.0		1.0
Bromomethane	<1.0		1.0
2-Butanone (MEK)	<10		10
Carbon disulfide	<2.0	*	2.0
Carbon tetrachloride	<1.0		1.0
Chlorobenzene	<1.0		1.0
2-Chloro-1,3-butadiene	<1.0		1.0
Chloroethane	<1.0		1.0
Chloroform	<1.0		1.0
Chloromethane	<1.0		1.0
3-Chloro-1-propene	<1.0		1.0
Chlorodibromomethane	<1.0		1.0
1,2-Dibromo-3-Chloropropane	<1.0		1.0
Ethylene Dibromide	<1.0		1.0
Dibromomethane	<1.0		1.0
trans-1,4-Dichloro-2-butene	<2.0		2.0
Dichlorodifluoromethane	<1.0		1.0
1,1-Dichloroethane	<1.0		1.0
1,2-Dichloroethane	<1.0		1.0
cis-1,2-Dichloroethene	<1.0		1.0
trans-1,2-Dichloroethene	<1.0		1.0
1,1-Dichloroethene	<1.0		1.0
1,2-Dichloropropane	<1.0		1.0
cis-1,3-Dichloropropene	<1.0		1.0
trans-1,3-Dichloropropene	<1.0		1.0
Ethylbenzene	<1.0		1.0
Ethyl methacrylate	<1.0		1.0
2-Hexanone	<10		10
Iodomethane	<5.0		5.0
Isobutyl alcohol	<40		40
Methacrylonitrile	<20		20
Methylene Chloride	<5.0		5.0
Methyl methacrylate	<1.0		1.0
4-Methyl-2-pentanone (MIBK)	<10		10
Pentachloroethane	<5.0		5.0
Propionitrile	<20		20
Styrene	<1.0		1.0
1,1,1,2-Tetrachloroethane	<1.0		1.0
1,1,2,2-Tetrachloroethane	<1.0		1.0
Tetrachloroethene	<1.0		1.0

Analytical Data

Client: Ashland Inc.

Job Number: 680-51170-1

Client Sample ID: MW-20

Lab Sample ID: 680-51170-3

Client Matrix: Water

Date Sampled: 09/29/2009 0720

Date Received: 09/30/2009 0853

8260B Volatile Organic Compounds (GC/MS)

Method:	8260B	Analysis Batch:	680-149463	Instrument ID:	MSA
Preparation:	5030B			Lab File ID:	a1069.d
Dilution:	1.0			Initial Weight/Volume:	5 mL
Date Analyzed:	10/01/2009 1601			Final Weight/Volume:	5 mL
Date Prepared:	10/01/2009 1601				

Analyte	Result (ug/L)	Qualifier	RL
Toluene	<1.0		1.0
1,1,1-Trichloroethane	<1.0		1.0
1,1,2-Trichloroethane	<1.0		1.0
Trichloroethene	<1.0		1.0
Trichlorofluoromethane	<1.0		1.0
1,2,3-Trichloropropane	<1.0		1.0
Vinyl acetate	<2.0		2.0
Vinyl chloride	<1.0		1.0
Xylenes, Total	<2.0		2.0

Surrogate	%Rec	Qualifier	Acceptance Limits
4-Bromofluorobenzene	99		75 - 120
Dibromofluoromethane	109		75 - 121
Toluene-d8 (Surf)	98		75 - 120

Analytical Data

Client: Ashland Inc.

Job Number: 680-51170-1

Client Sample ID: MW-22

Lab Sample ID: 680-51170-4

Client Matrix: Water

Date Sampled: 09/29/2009 0823

Date Received: 09/30/2009 0853

8260B Volatile Organic Compounds (GC/MS)

Method:	8260B	Analysis Batch:	680-149463	Instrument ID:	MSA
Preparation:	5030B			Lab File ID:	a1070.d
Dilution:	1.0			Initial Weight/Volume:	5 mL
Date Analyzed:	10/01/2009 1621			Final Weight/Volume:	5 mL
Date Prepared:	10/01/2009 1621				

Analyte	Result (ug/L)	Qualifier	RL
Acetone	86		25
Acetonitrile	<40		40
Acrolein	<20		20
Acrylonitrile	<20		20
Benzene	9.8		1.0
Dichlorobromomethane	<1.0		1.0
Bromoform	<1.0		1.0
Bromomethane	<1.0		1.0
2-Butanone (MEK)	<10		10
Carbon disulfide	<2.0		2.0
Carbon tetrachloride	<1.0		1.0
Chlorobenzene	7.7		1.0
2-Chloro-1,3-butadiene	<1.0		1.0
Chloroethane	<1.0		1.0
Chloroform	<1.0		1.0
Chloromethane	<1.0		1.0
3-Chloro-1-propene	<1.0		1.0
Chlorodibromomethane	<1.0		1.0
1,2-Dibromo-3-Chloropropane	<1.0		1.0
Ethylene Dibromide	<1.0		1.0
Dibromomethane	<1.0		1.0
trans-1,4-Dichloro-2-butene	<2.0		2.0
Dichlorodifluoromethane	<1.0		1.0
1,1-Dichloroethane	<1.0		1.0
1,2-Dichloroethane	<1.0		1.0
cis-1,2-Dichloroethene	<1.0		1.0
trans-1,2-Dichloroethene	<1.0		1.0
1,1-Dichloroethene	<1.0		1.0
1,2-Dichloropropane	<1.0		1.0
cis-1,3-Dichloropropene	<1.0		1.0
trans-1,3-Dichloropropene	<1.0		1.0
Ethylbenzene	<1.0		1.0
Ethyl methacrylate	<1.0		1.0
2-Hexanone	<10		10
Iodomethane	<5.0		5.0
Isobutyl alcohol	<40		40
Methacrylonitrile	<20		20
Methylene Chloride	<5.0		5.0
Methyl methacrylate	<1.0		1.0
4-Methyl-2-pentanone (MIBK)	11		10
Pentachloroethane	<5.0		5.0
Propionitrile	<20		20
Styrene	<1.0		1.0
1,1,1,2-Tetrachloroethane	<1.0		1.0
1,1,2,2-Tetrachloroethane	<1.0		1.0
Tetrachloroethene	<1.0		1.0

Analytical Data

Client: Ashland Inc.

Job Number: 680-51170-1

Client Sample ID: MW-22

Lab Sample ID: 680-51170-4

Client Matrix: Water

Date Sampled: 09/29/2009 0823

Date Received: 09/30/2009 0853

8260B Volatile Organic Compounds (GC/MS)

Method:	8260B	Analysis Batch:	680-149463	Instrument ID:	MSA
Preparation:	5030B			Lab File ID:	a1070.d
Dilution:	1.0			Initial Weight/Volume:	5 mL
Date Analyzed:	10/01/2009 1621			Final Weight/Volume:	5 mL
Date Prepared:	10/01/2009 1621				

Analyte	Result (ug/L)	Qualifier	RL
Toluene	<1.0		1.0
1,1,1-Trichloroethane	<1.0		1.0
1,1,2-Trichloroethane	<1.0		1.0
Trichloroethene	<1.0		1.0
Trichlorofluoromethane	<1.0		1.0
1,2,3-Trichloropropane	<1.0		1.0
Vinyl acetate	<2.0		2.0
Vinyl chloride	<1.0		1.0
Xylenes, Total	<2.0		2.0

Surrogate	%Rec	Qualifier	Acceptance Limits
4-Bromofluorobenzene	100		75 - 120
Dibromofluoromethane	105		75 - 121
Toluene-d8 (Surf)	96		75 - 120

Analytical Data

Client: Ashland Inc.

Job Number: 680-51170-1

Client Sample ID: MW-23

Date Sampled: 09/29/2009 0945

Lab Sample ID: 680-51170-5

Date Received: 09/30/2009 0853

Client Matrix: Water

8260B Volatile Organic Compounds (GC/MS)

Method:	8260B	Analysis Batch:	680-149463	Instrument ID:	MSA
Preparation:	5030B			Lab File ID:	a1071.d
Dilution:	50			Initial Weight/Volume:	5 mL
Date Analyzed:	10/01/2009 1640			Final Weight/Volume:	5 mL
Date Prepared:	10/01/2009 1640				

Analyte	Result (ug/L)	Qualifier	RL
Acetone	1600		1200
Acetonitrile	<2000		2000
Acrolein	<1000		1000
Acrylonitrile	<1000		1000
Benzene	9200		50
Dichlorobromomethane	<50		50
Bromoform	<50		50
Bromomethane	<50		50
2-Butanone (MEK)	<500		500
Carbon disulfide	<100		100
Carbon tetrachloride	<50		50
Chlorobenzene	190		50
2-Chloro-1,3-butadiene	<50		50
Chloroethane	<50		50
Chloroform	1400		50
Chloromethane	<50		50
3-Chloro-1-propene	<50		50
Chlorodibromomethane	<50		50
1,2-Dibromo-3-Chloropropane	<50		50
Ethylene Dibromide	<50		50
Dibromomethane	<50		50
trans-1,4-Dichloro-2-butene	<100		100
Dichlorodifluoromethane	<50		50
1,1-Dichloroethane	<50		50
1,2-Dichloroethane	<50		50
cis-1,2-Dichloroethene	<50		50
trans-1,2-Dichloroethene	<50		50
1,1-Dichloroethene	<50		50
1,2-Dichloropropane	<50		50
cis-1,3-Dichloropropene	<50		50
trans-1,3-Dichloropropene	<50		50
Ethylbenzene	<50		50
Ethyl methacrylate	<50		500
2-Hexanone	<500		250
Iodomethane	<250		2000
Isobutyl alcohol	<2000		1000
Methacrylonitrile	<1000		250
Methylene Chloride	290		50
Methyl methacrylate	<50		500
4-Methyl-2-pentanone (MIBK)	1300		250
Pentachloroethane	<250		1000
Propionitrile	<1000		50
Styrene	<50		50
1,1,1,2-Tetrachloroethane	<50		50
1,1,2,2-Tetrachloroethane	<50		50
Tetrachloroethene	<50		50

Analytical Data

Client: Ashland Inc.

Job Number: 680-51170-1

Client Sample ID: MW-23

Lab Sample ID: 680-51170-5

Client Matrix: Water

Date Sampled: 09/29/2009 0945

Date Received: 09/30/2009 0853

8260B Volatile Organic Compounds (GC/MS)

Method:	8260B	Analysis Batch:	680-149463	Instrument ID:	MSA
Preparation:	5030B			Lab File ID:	a1071.d
Dilution:	50			Initial Weight/Volume:	5 mL
Date Analyzed:	10/01/2009 1640			Final Weight/Volume:	5 mL
Date Prepared:	10/01/2009 1640				

Analyte	Result (ug/L)	Qualifier	RL
Toluene	3300		50
1,1,1-Trichloroethane	<50		50
1,1,2-Trichloroethane	<50		50
Trichloroethene	<50		50
Trichlorofluoromethane	<50		50
1,2,3-Trichloropropane	<50		50
Vinyl acetate	<100		100
Vinyl chloride	<50		50
Xylenes, Total	<100		100

Surrogate	%Rec	Qualifier	Acceptance Limits
4-Bromofluorobenzene	101		75 - 120
Dibromofluoromethane	101		75 - 121
Toluene-d8 (Surf)	101		75 - 120

Analytical Data

Client: Ashland Inc.

Job Number: 680-51170-1

Client Sample ID: Dup

Lab Sample ID: 680-51170-6FD

Client Matrix: Water

Date Sampled: 09/29/2009 0000

Date Received: 09/30/2009 0853

8260B Volatile Organic Compounds (GC/MS)

Method:	8260B	Analysis Batch:	680-149463	Instrument ID:	MSA
Preparation:	5030B			Lab File ID:	a1078.d
Dilution:	100			Initial Weight/Volume:	5 mL
Date Analyzed:	10/01/2009 1945			Final Weight/Volume:	5 mL
Date Prepared:	10/01/2009 1945				

Analyte	Result (ug/L)	Qualifier	RL
Acetone	<2500		2500
Acetonitrile	<4000		4000
Acrolein	<2000		2000
Acrylonitrile	<2000		2000
Benzene	8900		100
Dichlorobromomethane	<100		100
Bromoform	<100		100
Bromomethane	<100		100
2-Butanone (MEK)	<1000		1000
Carbon disulfide	<200	*	200
Carbon tetrachloride	<100		100
Chlorobenzene	200		100
2-Chloro-1,3-butadiene	<100		100
Chloroethane	<100		100
Chloroform	1500		100
Chloromethane	<100		100
3-Chloro-1-propene	<100		100
Chlorodibromomethane	<100		100
1,2-Dibromo-3-Chloropropane	<100		100
Ethylene Dibromide	<100		100
Dibromomethane	<100		100
trans-1,4-Dichloro-2-butene	<200		200
Dichlorodifluoromethane	<100		100
1,1-Dichloroethane	<100		100
1,2-Dichloroethane	<100		100
cis-1,2-Dichloroethene	<100		100
trans-1,2-Dichloroethene	<100		100
1,1-Dichloroethene	<100		100
1,2-Dichloropropene	<100		100
cis-1,3-Dichloropropene	<100		100
trans-1,3-Dichloropropene	<100		100
Ethylbenzene	<100		100
Ethyl methacrylate	<100		100
2-Hexanone	<1000		1000
Iodomethane	<500		500
Isobutyl alcohol	<4000		4000
Methacrylonitrile	<2000		2000
Methylene Chloride	<500		500
Methyl methacrylate	<100		100
4-Methyl-2-pentanone (MIBK)	1200		1000
Pentachloroethane	<500		500
Propionitrile	<2000		2000
Styrene	<100		100
1,1,1,2-Tetrachloroethane	<100		100
1,1,2,2-Tetrachloroethane	<100		100
Tetrachloroethene	<100		100

Analytical Data

Client: Ashland Inc.

Job Number: 680-51170-1

Client Sample ID: Dup

Lab Sample ID: 680-51170-6FD

Client Matrix: Water

Date Sampled: 09/29/2009 0000

Date Received: 09/30/2009 0853

8260B Volatile Organic Compounds (GC/MS)

Method:	8260B	Analysis Batch:	680-149463	Instrument ID:	MSA
Preparation:	5030B			Lab File ID:	a1078.d
Dilution:	100			Initial Weight/Volume:	5 mL
Date Analyzed:	10/01/2009 1945			Final Weight/Volume:	5 mL
Date Prepared:	10/01/2009 1945				

Analyte	Result (ug/L)	Qualifier	RL
Toluene	3300		100
1,1,1-Trichloroethane	<100		100
1,1,2-Trichloroethane	<100		100
Trichloroethylene	<100		100
Trichlorofluoromethane	<100		100
1,2,3-Trichloropropane	<100		100
Vinyl acetate	<200		200
Vinyl chloride	<100		100
Xylenes, Total	<200		200

Surrogate	%Rec	Qualifier	Acceptance Limits
4-Bromofluorobenzene	100		75 - 120
Dibromofluoromethane	103		75 - 121
Toluene-d8 (Surf)	103		75 - 120

Analytical Data

Client: Ashland Inc.

Job Number: 680-51170-1

Client Sample ID: MW-21

Lab Sample ID: 680-51170-7

Client Matrix: Water

Date Sampled: 09/29/2009 1142

Date Received: 09/30/2009 0853

8260B Volatile Organic Compounds (GC/MS)

Method:	8260B	Analysis Batch: 680-149463	Instrument ID: MSA
Preparation:	5030B	Lab File ID: a1072.d	
Dilution:	50	Initial Weight/Volume: 5 mL	
Date Analyzed:	10/01/2009 1700	Final Weight/Volume: 5 mL	
Date Prepared:	10/01/2009 1700		

Analyte	Result (ug/L)	Qualifier	RL
Acetone	<1200		1200
Acetonitrile	<2000		2000
Acrolein	<1000		1000
Acrylonitrile	<1000		1000
Benzene	4400		50
Dichlorobromomethane	<50		50
Bromoform	<50		50
Bromomethane	<50		50
2-Butanone (MEK)	<500		500
Carbon disulfide	<100		100
Carbon tetrachloride	<50		50
Chlorobenzene	170		50
2-Chloro-1,3-butadiene	<50		50
Chloroethane	<50		50
Chloroform	6800		50
Chloromethane	<50		50
3-Chloro-1-propene	<50		50
Chlorodibromomethane	<50		50
1,2-Dibromo-3-Chloropropane	<50		50
Ethylene Dibromide	<50		50
Dibromomethane	<50		50
trans-1,4-Dichloro-2-butene	<100		100
Dichlorodifluoromethane	<50		50
1,1-Dichloroethane	<50		50
1,2-Dichloroethane	<50		50
cis-1,2-Dichloroethene	<50		50
trans-1,2-Dichloroethene	<50		50
1,1-Dichloroethene	<50		50
1,2-Dichloropropane	<50		50
cis-1,3-Dichloropropene	<50		50
trans-1,3-Dichloropropene	<50		50
Ethylbenzene	<50		50
Ethyl methacrylate	<50		500
2-Hexanone	<500		250
Iodomethane	<250		2000
Isobutyl alcohol	<2000		1000
Methacrylonitrile	<1000		250
Methylene Chloride	<250		50
Methyl methacrylate	<50		500
4-Methyl-2-pentanone (MIBK)	640		250
Pentachloroethane	<250		1000
Propionitrile	<1000		50
Styrene	<50		50
1,1,1,2-Tetrachloroethane	<50		50
1,1,2,2-Tetrachloroethane	<50		50
Tetrachloroethene	<50		50

Analytical Data

Client: Ashland Inc.

Job Number: 680-51170-1

Client Sample ID: MW-21

Lab Sample ID: 680-51170-7

Client Matrix: Water

Date Sampled: 09/29/2009 1142

Date Received: 09/30/2009 0853

8260B Volatile Organic Compounds (GC/MS)

Method:	8260B	Analysis Batch:	680-149463	Instrument ID:	MSA
Preparation:	5030B			Lab File ID:	a1072.d
Dilution:	50			Initial Weight/Volume:	5 mL
Date Analyzed:	10/01/2009 1700			Final Weight/Volume:	5 mL
Date Prepared:	10/01/2009 1700				

Analyte	Result (ug/L)	Qualifier	RL
Toluene	4800		50
1,1,1-Trichloroethane	<50		50
1,1,2-Trichloroethane	<50		50
Trichloroethylene	<50		50
Trichlorofluoromethane	<50		50
1,2,3-Trichloropropane	<50		50
Vinyl acetate	<100		100
Vinyl chloride	<50		50
Xylenes, Total	<100		100
Surrogate	%Rec	Qualifier	Acceptance Limits
4-Bromofluorobenzene	101		75 - 120
Dibromofluoromethane	105		75 - 121
Toluene-d8 (Surf)	99		75 - 120

Analytical Data

Client: Ashland Inc.

Job Number: 680-51170-1

Client Sample ID: Trip Blank

Lab Sample ID: 680-51170-8TB

Client Matrix: Water

Date Sampled: 09/29/2009 0000

Date Received: 09/30/2009 0853

8260B Volatile Organic Compounds (GC/MS)

Method:	8260B	Analysis Batch:	680-149440	Instrument ID:	MSA
Preparation:	5030B			Lab File ID:	a1053.d
Dilution:	1.0			Initial Weight/Volume:	5 mL
Date Analyzed:	09/30/2009 1942			Final Weight/Volume:	5 mL
Date Prepared:	09/30/2009 1942				

Analyte	Result (ug/L)	Qualifier	RL
Acetone	<25		25
Acetonitrile	<40		40
Acrolein	<20		20
Acrylonitrile	<20		20
Benzene	<1.0		1.0
Dichlorobromomethane	<1.0		1.0
Bromoform	<1.0		1.0
Bromomethane	<1.0		1.0
2-Butanone (MEK)	<10		10
Carbon disulfide	<2.0	*	2.0
Carbon tetrachloride	<1.0		1.0
Chlorobenzene	<1.0		1.0
Chloroethane	<1.0		1.0
Chloroform	<1.0		1.0
Chloromethane	<1.0		1.0
2-Chloro-1,3-butadiene	<1.0		1.0
3-Chloro-1-propene	<1.0		1.0
Chlorodibromomethane	<1.0		1.0
1,2-Dibromo-3-Chloropropane	<1.0		1.0
Ethylene Dibromide	<1.0		1.0
Dibromomethane	<1.0		1.0
trans-1,4-Dichloro-2-butene	<2.0		2.0
Dichlorodifluoromethane	<1.0		1.0
1,1-Dichloroethane	<1.0		1.0
1,2-Dichloroethane	<1.0		1.0
1,1-Dichloroethene	<1.0		1.0
cis-1,2-Dichloroethene	<1.0		1.0
trans-1,2-Dichloroethene	<1.0		1.0
1,2-Dichloropropane	<1.0		1.0
cis-1,3-Dichloropropene	<1.0		1.0
trans-1,3-Dichloropropene	<1.0		1.0
Ethylbenzene	<1.0		1.0
Ethyl methacrylate	<1.0		1.0
2-Hexanone	<10		10
Iodomethane	<5.0		5.0
Isobutyl alcohol	<40		40
Methacrylonitrile	<20		20
Methylene Chloride	<5.0		5.0
Methyl methacrylate	<1.0		1.0
4-Methyl-2-pentanone (MIBK)	<10		10
Pentachloroethane	<5.0		5.0
Propionitrile	<20		20
Styrene	<1.0		1.0
1,1,1,2-Tetrachloroethane	<1.0		1.0
1,1,2,2-Tetrachloroethane	<1.0		1.0
Tetrachloroethene	<1.0		1.0

Analytical Data

Client: Ashland Inc.

Job Number: 680-51170-1

Client Sample ID: Trip Blank

Lab Sample ID: 680-51170-8TB

Client Matrix: Water

Date Sampled: 09/29/2009 0000

Date Received: 09/30/2009 0853

8260B Volatile Organic Compounds (GC/MS)

Method:	8260B	Analysis Batch:	680-149440	Instrument ID:	MSA
Preparation:	5030B			Lab File ID:	a1053.d
Dilution:	1.0			Initial Weight/Volume:	5 mL
Date Analyzed:	09/30/2009 1942			Final Weight/Volume:	5 mL
Date Prepared:	09/30/2009 1942				

Analyte	Result (ug/L)	Qualifier	RL
Toluene	<1.0		1.0
1,1,1-Trichloroethane	<1.0		1.0
1,1,2-Trichloroethane	<1.0		1.0
Trichloroethylene	<1.0		1.0
Trichlorofluoromethane	<1.0		1.0
1,2,3-Trichloropropane	<1.0		1.0
Vinyl acetate	<2.0		2.0
Vinyl chloride	<1.0		1.0
Xylenes, Total	<2.0		2.0

Surrogate	%Rec	Qualifier	Acceptance Limits
4-Bromofluorobenzene	101		75 - 120
Dibromofluoromethane	105		75 - 121
Toluene-d8 (Surf)	116		75 - 120

Analytical Data

Client: Ashland Inc.

Job Number: 680-51170-1

Client Sample ID: Trip Blank

Lab Sample ID: 680-51170-9TB

Client Matrix: Water

Date Sampled: 09/29/2009 0000

Date Received: 09/30/2009 0853

8260B Volatile Organic Compounds (GC/MS)

Method:	8260B	Analysis Batch: 680-149440	Instrument ID: MSA
Preparation:	5030B	Lab File ID: a1055.d	
Dilution:	1.0	Initial Weight/Volume: 5 mL	
Date Analyzed:	09/30/2009 2011	Final Weight/Volume: 5 mL	
Date Prepared:	09/30/2009 2011		

Analyte	Result (ug/L)	Qualifier	RL
Acetone	<25		25
Acetonitrile	<40		40
Acrolein	<20		20
Acrylonitrile	<20		20
Benzene	<1.0		1.0
Dichlorobromomethane	<1.0		1.0
Bromoform	<1.0		1.0
Bromomethane	<1.0		1.0
2-Butanone (MEK)	<10		10
Carbon disulfide	<2.0		2.0
Carbon tetrachloride	<1.0		1.0
Chlorobenzene	<1.0		1.0
Chloroethane	<1.0		1.0
Chloroform	<1.0		1.0
Chloromethane	<1.0		1.0
2-Chloro-1,3-butadiene	<1.0		1.0
3-Chloro-1-propene	<1.0		1.0
Chlorodibromomethane	<1.0		1.0
1,2-Dibromo-3-Chloropropane	<1.0		1.0
Ethylene Dibromide	<1.0		1.0
Dibromomethane	<1.0		1.0
trans-1,4-Dichloro-2-butene	<2.0		2.0
Dichlorodifluoromethane	<1.0		1.0
1,1-Dichloroethane	<1.0		1.0
1,2-Dichloroethane	<1.0		1.0
1,1-Dichloroethene	<1.0		1.0
cis-1,2-Dichloroethene	<1.0		1.0
trans-1,2-Dichloroethene	<1.0		1.0
1,2-Dichloropropene	<1.0		1.0
cis-1,3-Dichloropropene	<1.0		1.0
trans-1,3-Dichloropropene	<1.0		1.0
Ethylbenzene	<1.0		1.0
Ethyl methacrylate	<1.0		1.0
2-Hexanone	<10		10
Iodomethane	<5.0		5.0
Isobutyl alcohol	<40		40
Methacrylonitrile	<20		20
Methylene Chloride	<5.0		5.0
Methyl methacrylate	<1.0		1.0
4-Methyl-2-pentanone (MIBK)	<10		10
Pentachloroethane	<5.0		5.0
Propionitrile	<20		20
Styrene	<1.0		1.0
1,1,1,2-Tetrachloroethane	<1.0		1.0
1,1,2,2-Tetrachloroethane	<1.0		1.0
Tetrachloroethene	<1.0		1.0

Analytical Data

Client: Ashland Inc.

Job Number: 680-51170-1

Client Sample ID: Trip Blank

Lab Sample ID: 680-51170-9TB

Client Matrix: Water

Date Sampled: 09/29/2009 00:00

Date Received: 09/30/2009 08:53

8260B Volatile Organic Compounds (GC/MS)

Method: 8260B
Preparation: 5030B
Dilution: 1.0
Date Analyzed: 09/30/2009 2011
Date Prepared: 09/30/2009 2011

Analysis Batch: 680-149440

Instrument ID: MSA
Lab File ID: a1055.d
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL

Analyte	Result (ug/L)	Qualifier	RL
Toluene	<1.0		1.0
1,1,1-Trichloroethane	<1.0		1.0
1,1,2-Trichloroethane	<1.0		1.0
Trichloroethene	<1.0		1.0
Trichlorofluoromethane	<1.0		1.0
1,2,3-Trichloropropane	<1.0		1.0
Vinyl acetate	<2.0		2.0
Vinyl chloride	<1.0		1.0
Xylenes, Total	<2.0		2.0

Surrogate	%Rec	Qualifier	Acceptance Limits
4-Bromofluorobenzene	100		75 - 120
Dibromofluoromethane	105		75 - 121
Toluene-d8 (Surr)	118		75 - 120

Analytical Data

Client: Ashland Inc.

Job Number: 680-51170-1

Client Sample ID: Trip Blank

Lab Sample ID: 680-51170-10TB

Client Matrix: Water

Date Sampled: 09/29/2009 0000

Date Received: 09/30/2009 0853

8260B Volatile Organic Compounds (GC/MS)

Method:	8260B	Analysis Batch:	680-149463	Instrument ID:	MSA
Preparation:	5030B			Lab File ID:	a1066.d
Dilution:	1.0			Initial Weight/Volume:	5 mL
Date Analyzed:	10/01/2009 1503			Final Weight/Volume:	5 mL
Date Prepared:	10/01/2009 1503				

Analyte	Result (ug/L)	Qualifier	RL
Acetone	<25		25
Acetonitrile	<40		40
Acrolein	<20		20
Acrylonitrile	<20		20
Benzene	<1.0		1.0
Dichlorobromomethane	<1.0		1.0
Bromoform	<1.0		1.0
Bromomethane	<1.0		1.0
2-Butanone (MEK)	<10		10
Carbon disulfide	<2.0	*	2.0
Carbon tetrachloride	<1.0		1.0
Chlorobenzene	<1.0		1.0
Chloroethane	<1.0		1.0
Chloroform	<1.0		1.0
Chloromethane	<1.0		1.0
2-Chloro-1,3-butadiene	<1.0		1.0
3-Chloro-1-propene	<1.0		1.0
Chlorodibromomethane	<1.0		1.0
1,2-Dibromo-3-Chloropropane	<1.0		1.0
Ethylene Dibromide	<1.0		1.0
Dibromomethane	<1.0		1.0
trans-1,4-Dichloro-2-butene	<2.0		2.0
Dichlorodifluoromethane	<1.0		1.0
1,1-Dichloroethane	<1.0		1.0
1,2-Dichloroethane	<1.0		1.0
1,1-Dichloroethene	<1.0		1.0
cis-1,2-Dichloroethene	<1.0		1.0
trans-1,2-Dichloroethene	<1.0		1.0
1,2-Dichloropropane	<1.0		1.0
cis-1,3-Dichloropropene	<1.0		1.0
trans-1,3-Dichloropropene	<1.0		1.0
Ethylbenzene	<1.0		1.0
Ethyl methacrylate	<1.0		1.0
2-Hexanone	<10		10
Iodomethane	<5.0		5.0
Isobutyl alcohol	<40		40
Methacrylonitrile	<20		20
Methylene Chloride	<5.0		5.0
Methyl methacrylate	<1.0		1.0
4-Methyl-2-pentanone (MIBK)	<10		10
Pentachloroethane	<5.0		5.0
Propionitrile	<20		20
Styrene	<1.0		1.0
1,1,1,2-Tetrachloroethane	<1.0		1.0
1,1,2,2-Tetrachloroethane	<1.0		1.0
Tetrachloroethene	<1.0		1.0

Analytical Data

Client: Ashland Inc.

Job Number: 680-51170-1

Client Sample ID: Trip Blank

Lab Sample ID: 680-51170-10TB

Client Matrix: Water

Date Sampled: 09/29/2009 0000

Date Received: 09/30/2009 0853

8260B Volatile Organic Compounds (GC/MS)

Method:	8260B	Analysis Batch:	680-149463	Instrument ID:	MSA
Preparation:	5030B			Lab File ID:	a1066.d
Dilution:	1.0			Initial Weight/Volume:	5 mL
Date Analyzed:	10/01/2009 1503			Final Weight/Volume:	5 mL
Date Prepared:	10/01/2009 1503				

Analyte	Result (ug/L)	Qualifier	RL
Toluene	<1.0		1.0
1,1,1-Trichloroethane	<1.0		1.0
1,1,2-Trichloroethane	<1.0		1.0
Trichloroethene	<1.0		1.0
Trichlorofluoromethane	<1.0		1.0
1,2,3-Trichloropropane	<1.0		1.0
Vinyl acetate	<2.0		2.0
Vinyl chloride	<1.0		1.0
Xylenes, Total	<2.0		2.0

Surrogate	%Rec	Qualifier	Acceptance Limits
4-Bromofluorobenzene	97		75 - 120
Dibromofluoromethane	103		75 - 121
Toluene-d8 (Sur)	103		75 - 120

Analytical Data

Client: Ashland Inc.

Job Number: 680-51170-1

Client Sample ID: MW-24

Lab Sample ID: 680-51170-1

Date Sampled: 09/28/2009 1605

Client Matrix: Water

Date Received: 09/30/2009 0853

8270C Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)

Method:	8270C	Analysis Batch:	680-150416	Instrument ID:	MSG
Preparation:	3520C	Prep Batch:	680-149426	Lab File ID:	g5581.d
Dilution:	1.0			Initial Weight/Volume:	1060 mL
Date Analyzed:	10/12/2009 1135			Final Weight/Volume:	1 mL
Date Prepared:	10/01/2009 1512			Injection Volume:	

Analyte	Result (ug/L)	Qualifier	RL
Acenaphthene	<9.4		9.4
Acenaphthylene	<9.4		9.4
Acetophenone	<9.4		9.4
2-Acetylaminofluorene	<9.4		9.4
alpha,alpha-Dimethyl phenethylamine	<1900	*	1900
4-Aminobiphenyl	<9.4		9.4
Aniline	<19		19
Anthracene	<9.4		9.4
Aramite, Total	<9.4		9.4
Benzo[a]anthracene	<9.4		9.4
Benzo[a]pyrene	<9.4		9.4
Benzo[b]fluoranthene	<9.4		9.4
Benzo[g,h,i]perylene	<9.4		9.4
Benzo[k]fluoranthene	<9.4		9.4
Benzyl alcohol	<9.4		9.4
1,1'-Biphenyl	<9.4		9.4
Bis(2-chloroethoxy)methane	<9.4	*	9.4
Bis(2-chloroethyl)ether	<9.4		9.4
bis(chloroisopropyl) ether	<9.4		9.4
Bis(2-ethylhexyl) phthalate	<9.4		9.4
4-Bromophenyl phenyl ether	<9.4		9.4
Butyl benzyl phthalate	<9.4		9.4
4-Chloroaniline	<19		19
4-Chloro-3-methylphenol	<9.4		9.4
2-Chloronaphthalene	<9.4		9.4
2-Chlorophenol	<9.4		9.4
4-Chlorophenyl phenyl ether	<9.4		9.4
Chrysene	<9.4		9.4
Diallate	<9.4		9.4
Dibenz(a,h)anthracene	<9.4		9.4
Dibenzofuran	<9.4		9.4
1,2-Dichlorobenzene	<9.4		9.4
1,3-Dichlorobenzene	<9.4		9.4
1,4-Dichlorobenzene	<9.4		9.4
3,3'-Dichlorobenzidine	<19		19
2,4-Dichlorophenol	<9.4		9.4
2,6-Dichlorophenol	<9.4		9.4
Diethyl phthalate	<9.4		9.4
Dimethoate	<9.4		9.4
7,12-Dimethylbenz(a)anthracene	<9.4		9.4
3,3'-Dimethylbenzidine	<19		19
2,4-Dimethylphenol	<9.4		9.4
Dimethyl phthalate	<9.4		9.4
Di-n-butyl phthalate	<9.4		9.4
1,3-Dinitrobenzene	<9.4		9.4
4,6-Dinitro-2-methylphenol	<47		47

Analytical Data

Client: Ashland Inc.

Job Number: 680-51170-1

Client Sample ID: MW-24

Lab Sample ID: 680-51170-1

Date Sampled: 09/28/2009 1605

Client Matrix: Water

Date Received: 09/30/2009 0853

8270C Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)

Method:	8270C	Analysis Batch:	680-150416	Instrument ID:	MSG
Preparation:	3520C	Prep Batch:	680-149426	Lab File ID:	g5581.d
Dilution:	1.0			Initial Weight/Volume:	1060 mL
Date Analyzed:	10/12/2009 1135			Final Weight/Volume:	1 mL
Date Prepared:	10/01/2009 1512			Injection Volume:	

Analyte	Result (ug/L)	Qualifier	RL
2,4-Dinitrophenol	<47		47
2,4-Dinitrotoluene	<9.4		9.4
2,6-Dinitrotoluene	<9.4		9.4
Di-n-octyl phthalate	<9.4		9.4
Dinoseb	<9.4		9.4
1,4-Dioxane	<9.4		9.4
Disulfoton	<9.4		9.4
Ethyl methanesulfonate	<9.4		9.4
Ethyl Parathion	<9.4		9.4
Famphur	<9.4		9.4
Fluoranthene	<9.4		9.4
Fluorene	<9.4		9.4
Hexachlorobenzene	<9.4		9.4
Hexachlorobutadiene	<9.4		9.4
Hexachlorocyclopentadiene	<9.4		9.4
Hexachloroethane	<9.4		9.4
Hexachlorophene	<4700		4700
Hexachloropropene	<9.4		9.4
Indeno[1,2,3-cd]pyrene	<9.4		9.4
Isophorone	<9.4		9.4
Isosafrole	<9.4		9.4
Methapyniene	<1900	*	1900
3-Methylcholanthrene	<9.4		9.4
Methyl methanesulfonate	<9.4	*	9.4
2-Methylnaphthalene	<9.4		9.4
Methyl parathion	<9.4		9.4
2-Methylphenol	<9.4		9.4
3 & 4 Methylphenol	<9.4		9.4
Naphthalene	<9.4		9.4
1,4-Naphthoquinone	<9.4		9.4
1-Naphthylamine	<9.4	*	9.4
2-Naphthylamine	<9.4		9.4
2-Nitroaniline	<47		47
3-Nitroaniline	<47		47
4-Nitroaniline	<47		47
Nitrobenzene	<9.4		9.4
2-Nitrophenol	<9.4		9.4
4-Nitrophenol	<47		47
4-Nitroquinoline-1-oxide	<19		19
N-Nitro-o-toluidine	<9.4		9.4
N-Nitrosodiethylamine	<9.4		9.4
N-Nitrosodimethylamine	<9.4		9.4
N-Nitrosodi-n-butylamine	<9.4		9.4
N-Nitrosodi-n-propylamine	<9.4		9.4
N-Nitrosodiphenylamine	<9.4		9.4
N-Nitrosomethylethylamine	<9.4		9.4

Analytical Data

Client: Ashland Inc.

Job Number: 680-51170-1

Client Sample ID: MW-24

Lab Sample ID: 680-51170-1

Client Matrix: Water

Date Sampled: 09/28/2009 1605

Date Received: 09/30/2009 0853

8270C Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)

Method:	8270C	Analysis Batch: 680-150416	Instrument ID:	MSG
Preparation:	3520C	Prep Batch: 680-149426	Lab File ID:	g5581.d
Dilution:	1.0		Initial Weight/Volume:	1060 mL
Date Analyzed:	10/12/2009 1135		Final Weight/Volume:	1 mL
Date Prepared:	10/01/2009 1512		Injection Volume:	

Analyte	Result (ug/L)	Qualifier	RL
N-Nitrosomorpholine	<9.4		9.4
N-Nitrosopiperidine	<9.4		9.4
N-Nitrosopyrrolidine	<9.4		9.4
o,o',o"-Triethylphosphorothioate	<9.4		9.4
p-Dimethylamino azobenzene	<9.4		9.4
Pentachlorobenzene	<9.4		9.4
Pentachloronitrobenzene	<9.4		9.4
Pentachlorophenol	<47		47
Phenacetin	<9.4		9.4
Phenanthrene	<9.4		9.4
Phenol	<9.4		9.4
Phorate	<9.4		9.4
2-Picoline	<9.4	*	9.4
p-Phenylenediamine	<1900	*	1900
Pronamide	<9.4		9.4
Pyrene	<9.4		9.4
Pyridine	<47	*	47
Safrole, Total	<9.4		9.4
Sulfotep	<9.4		9.4
1,2,4,5-Tetrachlorobenzene	<9.4		9.4
2,3,4,6-Tetrachlorophenol	<9.4		9.4
Thionazin	<9.4		9.4
2-Toluidine	<9.4		9.4
1,2,4-Trichlorobenzene	<9.4		9.4
2,4,5-Trichlorophenol	<9.4		9.4
2,4,6-Trichlorophenol	<9.4		9.4
1,3,5-Trinitrobenzene	<9.4		9.4
Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	87		40 - 139
2-Fluorobiphenyl	68		50 - 113
2-Fluorophenol	69		36 - 110
Terphenyl-d14	82		10 - 121
Phenol-d5	69		38 - 116
Nitrobenzene-d5	70		45 - 112

Analytical Data

Client: Ashland Inc.

Job Number: 680-51170-1

Client Sample ID: MW-24

Lab Sample ID: 680-51170-1

Client Matrix: Water

Date Sampled: 09/28/2009 1605

Date Received: 09/30/2009 0853

8270C Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)

Method:	8270C	Analysis Batch:	680-151231	Instrument ID:	MSG
Preparation:	3520C	Prep Batch:	680-150728	Lab File ID:	g5633.d
Dilution:	1.0			Initial Weight/Volume:	1060 mL
Date Analyzed:	10/20/2009 1309	Run Type:	RE	Final Weight/Volume:	1 mL
Date Prepared:	10/16/2009 1358			Injection Volume:	

Analyte	Result (ug/L)	Qualifier	RL
Acenaphthene	<9.4	H	9.4
Acenaphthylene	<9.4	H	9.4
Acetophenone	<9.4	H	9.4
2-Acetylaminofluorene	<9.4	H	9.4
alpha,alpha-Dimethyl phenethylamine	<1900	H	1900
4-Aminobiphenyl	<9.4	H	9.4
Aniline	<19	H	19
Anthracene	<9.4	H	9.4
Aramite, Total	<9.4	H	9.4
Benzo[a]anthracene	<9.4	H	9.4
Benzo[a]pyrene	<9.4	H	9.4
Benzo[b]fluoranthene	<9.4	H	9.4
Benzo[g,h,i]perylene	<9.4	H	9.4
Benzo[k]fluoranthene	<9.4	H	9.4
Benzyl alcohol	<9.4	H	9.4
1,1'-Biphenyl	<9.4	H	9.4
Bis(2-chloroethoxy)methane	<9.4	H	9.4
Bis(2-chloroethyl)ether	<9.4	H	9.4
bis(chloroisopropyl) ether	<9.4	H	9.4
Bis(2-ethylhexyl) phthalate	<9.4	H	9.4
4-Bromophenyl phenyl ether	<9.4	H	9.4
Butyl benzyl phthalate	<9.4	H	9.4
4-Chloroaniline	<19	H	19
4-Chloro-3-methylphenol	<9.4	H	9.4
2-Chloronaphthalene	<9.4	H	9.4
2-Chlorophenol	<9.4	H	9.4
4-Chlorophenyl phenyl ether	<9.4	H	9.4
Chrysene	<9.4	H	9.4
Diallate	<9.4	H	9.4
Dibenz(a,h)anthracene	<9.4	H	9.4
Dibenzofuran	<9.4	H	9.4
1,2-Dichlorobenzene	<9.4	H	9.4
1,3-Dichlorobenzene	<9.4	H	9.4
1,4-Dichlorobenzene	<9.4	H	9.4
3,3'-Dichlorobenzidine	<19	H	19
2,4-Dichlorophenol	<9.4	H	9.4
2,6-Dichlorophenol	<9.4	H	9.4
Diethyl phthalate	<9.4	H	9.4
Dimethoate	<9.4	H	9.4
7,12-Dimethylbenz(a)anthracene	<9.4	H	9.4
3,3'-Dimethylbenzidine	<19	H	19
2,4-Dimethylphenol	<9.4	H	9.4
Dimethyl phthalate	<9.4	H	9.4
Di-n-butyl phthalate	<9.4	H	9.4
1,3-Dinitrobenzene	<9.4	H	9.4
4,6-Dinitro-2-methylphenol	<47	H	47

Analytical Data

Client: Ashland Inc.

Job Number: 680-51170-1

Client Sample ID: MW-24

Lab Sample ID: 680-51170-1

Date Sampled: 09/28/2009 1605

Client Matrix: Water

Date Received: 09/30/2009 0853

8270C Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)

Method:	8270C	Analysis Batch:	680-151231	Instrument ID:	MSG
Preparation:	3520C	Prep Batch:	680-150728	Lab File ID:	g5633.d
Dilution:	1.0			Initial Weight/Volume:	1060 mL
Date Analyzed:	10/20/2009 1309	Run Type:	RE	Final Weight/Volume:	1 mL
Date Prepared:	10/16/2009 1358			Injection Volume:	

Analyte	Result (ug/L)	Qualifier	RL
2,4-Dinitrophenol	<47	H	47
2,4-Dinitrotoluene	<9.4	H	9.4
2,6-Dinitrotoluene	<9.4	H	9.4
Di-n-octyl phthalate	<9.4	H	9.4
Dinoseb	<9.4	H	9.4
1,4-Dioxane	<9.4	H	9.4
Disulfoton	<9.4	H	9.4
Ethyl methanesulfonate	<9.4	H	9.4
Ethyl Parathion	<9.4	H	9.4
Famphur	<9.4	H *	9.4
Fluoranthene	<9.4	H	9.4
Fluorene	<9.4	H	9.4
Hexachlorobenzene	<9.4	H	9.4
Hexachlorobutadiene	<9.4	H	9.4
Hexachlorocyclopentadiene	<9.4	H	9.4
Hexachloroethane	<9.4	H	9.4
Hexachlorophene	<4700	H	4700
Hexachloropropene	<9.4	H	9.4
Indeno[1,2,3-cd]pyrene	<9.4	H	9.4
Isophorone	<9.4	H	9.4
Isosafrole	<9.4	H	9.4
Methapyriene	<1900	H	1900
3-Methylcholanthrene	<9.4	H	9.4
Methyl methanesulfonate	<9.4	H *	9.4
2-Methylnaphthalene	<9.4	H	9.4
Methyl parathion	<9.4	H	9.4
2-Methylphenol	<9.4	H	9.4
3 & 4 Methylphenol	<9.4	H	9.4
Naphthalene	<9.4	H	9.4
1,4-Naphthoquinone	<9.4	H *	9.4
1-Naphthylamine	<9.4	H *	9.4
2-Naphthylamine	<9.4	H	9.4
2-Nitroaniline	<47	H	47
3-Nitroaniline	<47	H	47
4-Nitroaniline	<47	H	47
Nitrobenzene	<9.4	H	9.4
2-Nitrophenol	<9.4	H	9.4
4-Nitrophenol	<47	H	47
4-Nitroquinoline-1-oxide	<19	H	19
N-Nitro-o-toluidine	<9.4	H	9.4
N-Nitrosodiethylamine	<9.4	H	9.4
N-Nitrosodimethylamine	<9.4	H	9.4
N-Nitrosodi-n-butylamine	<9.4	H	9.4
N-Nitrosodi-n-propylamine	<9.4	H	9.4
N-Nitrosodiphenylamine	<9.4	H	9.4
N-Nitrosomethylmethyamine	<9.4	H	9.4

Analytical Data

Client: Ashland Inc.

Job Number: 680-51170-1

Client Sample ID: MW-24

Lab Sample ID: 680-51170-1

Client Matrix: Water

Date Sampled: 09/28/2009 1605

Date Received: 09/30/2009 0853

8270C Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)

Method:	8270C	Analysis Batch:	680-151231	Instrument ID:	MSG
Preparation:	3520C	Prep Batch:	680-150728	Lab File ID:	g5633.d
Dilution:	1.0			Initial Weight/Volume:	1060 mL
Date Analyzed:	10/20/2009 1309	Run Type:	RE	Final Weight/Volume:	1 mL
Date Prepared:	10/16/2009 1358			Injection Volume:	

Analyte	Result (ug/L)	Qualifier	RL
N-Nitrosomorpholine	<9.4	H	9.4
N-Nitrosopiperidine	<9.4	H	9.4
N-Nitrosopyrrolidine	<9.4	H	9.4
o,o',o"-Triethylphosphorothioate	<9.4	H	9.4
p-Dimethylamino azobenzene	<9.4	H	9.4
Pentachlorobenzene	<9.4	H	9.4
Pentachloronitrobenzene	<9.4	H	9.4
Pentachlorophenol	<47	H	47
Phenacetin	<9.4	H	9.4
Phenanthrene	<9.4	H	9.4
Phenol	<9.4	H	9.4
Phorate	<9.4	H	9.4
2-Picoline	<9.4	H	9.4
p-Phenylenediamine	<1900	H	1900
Pronamide	<9.4	H	9.4
Pyrene	<9.4	H	9.4
Pyridine	<47	H	47
Safrole, Total	<9.4	H	9.4
Sulfotep	<9.4	H	9.4
1,2,4,5-Tetrachlorobenzene	<9.4	H	9.4
2,3,4,6-Tetrachlorophenol	<9.4	H	9.4
Thionazin	<9.4	H	9.4
2-Toluidine	<9.4	H	9.4
1,2,4-Trichlorobenzene	<9.4	H	9.4
2,4,5-Trichlorophenol	<9.4	H	9.4
2,4,6-Trichlorophenol	<9.4	H	9.4
1,3,5-Trinitrobenzene	<9.4	H	9.4

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	71		40 - 139
2-Fluorobiphenyl	75		50 - 113
2-Fluorophenol	67		36 - 110
Terphenyl-d14	28		10 - 121
Phenol-d5	67		38 - 116
Nitrobenzene-d5	75		45 - 112

Analytical Data

Client: Ashland Inc.

Job Number: 680-51170-1

Client Sample ID: RB

Lab Sample ID: 680-51170-2RB

Client Matrix: Water

Date Sampled: 09/28/2009 1745

Date Received: 09/30/2009 0853

8270C Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)

Method:	8270C	Analysis Batch: 680-149819	Instrument ID:	MST
Preparation:	3520C	Prep Batch: 680-149426	Lab File ID:	t3669.d
Dilution:	1.0		Initial Weight/Volume:	1060 mL
Date Analyzed:	10/05/2009 2356		Final Weight/Volume:	1 mL
Date Prepared:	10/01/2009 1512		Injection Volume:	

Analyte	Result (ug/L)	Qualifier	RL
Acenaphthene	<9.4		9.4
Acenaphthylene	<9.4		9.4
Acetophenone	<9.4		9.4
2-Acetylaminofluorene	<9.4		9.4
alpha,alpha-Dimethyl phenethylamine	<1900	*	1900
4-Aminobiphenyl	<9.4		9.4
Aniline	<19		19
Anthracene	<9.4		9.4
Aramite, Total	<9.4		9.4
Benzo[a]anthracene	<9.4		9.4
Benzo[a]pyrene	<9.4		9.4
Benzo[b]fluoranthene	<9.4		9.4
Benzo[g,h,i]perylene	<9.4		9.4
Benzo[k]fluoranthene	<9.4		9.4
Benzyl alcohol	<9.4		9.4
1,1'-Biphenyl	<9.4		9.4
Bis(2-chloroethoxy)methane	<9.4		9.4
Bis(2-chloroethyl)ether	<9.4		9.4
bis(chloroisopropyl) ether	<9.4		9.4
Bis(2-ethylhexyl) phthalate	<9.4		9.4
4-Bromophenyl phenyl ether	<9.4		9.4
Butyl benzyl phthalate	<9.4		9.4
4-Chloroaniline	<19		19
4-Chloro-3-methylphenol	<9.4		9.4
2-Chloronaphthalene	<9.4		9.4
2-Chlorophenol	<9.4		9.4
4-Chlorophenyl phenyl ether	<9.4		9.4
Chrysene	<9.4		9.4
Diallate	<9.4		9.4
Dibenz(a,h)anthracene	<9.4		9.4
Dibenzofuran	<9.4		9.4
1,2-Dichlorobenzene	<9.4		9.4
1,3-Dichlorobenzene	<9.4		9.4
1,4-Dichlorobenzene	<9.4		9.4
3,3'-Dichlorobenzidine	<19		19
2,4-Dichlorophenol	<9.4		9.4
2,6-Dichlorophenol	<9.4		9.4
Diethyl phthalate	<9.4		9.4
Dimethoate	<9.4		9.4
7,12-Dimethylbenz(a)anthracene	<9.4		9.4
3,3'-Dimethylbenzidine	<19		19
2,4-Dimethylphenol	<9.4		9.4
Dimethyl phthalate	<9.4		9.4
Di-n-butyl phthalate	<9.4		9.4
1,3-Dinitrobenzene	<9.4		9.4
4,6-Dinitro-2-methylphenol	<47		47

Analytical Data

Client: Ashland Inc.

Job Number: 680-51170-1

Client Sample ID: RB

Lab Sample ID: 680-51170-2RB

Date Sampled: 09/28/2009 1745

Client Matrix: Water

Date Received: 09/30/2009 0853

8270C Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)

Method:	8270C	Analysis Batch:	680-149819	Instrument ID:	MST
Preparation:	3520C	Prep Batch:	680-149426	Lab File ID:	t3669.d
Dilution:	1.0			Initial Weight/Volume:	1060 mL
Date Analyzed:	10/05/2009 2356			Final Weight/Volume:	1 mL
Date Prepared:	10/01/2009 1512			Injection Volume:	

Analyte	Result (ug/L)	Qualifier	RL
2,4-Dinitrophenol	<47		47
2,4-Dinitrotoluene	<9.4		9.4
2,6-Dinitrotoluene	<9.4		9.4
Di-n-octyl phthalate	<9.4		9.4
Dinoseb	<9.4		9.4
1,4-Dioxane	<9.4		9.4
Disulfoton	<9.4		9.4
Ethyl methanesulfonate	<9.4		9.4
Ethyl Parathion	<9.4		9.4
Famphur	<9.4		9.4
Fluoranthene	<9.4		9.4
Fluorene	<9.4		9.4
Hexachlorobenzene	<9.4		9.4
Hexachlorobutadiene	<9.4		9.4
Hexachlorocyclopentadiene	<9.4		9.4
Hexachloroethane	<9.4		9.4
Hexachlorophene	<4700		4700
Hexachloropropene	<9.4		9.4
Indeno[1,2,3-cd]pyrene	<9.4		9.4
Isophorone	<9.4		9.4
Isosafrole	<9.4		9.4
Methapyrilene	<1900	*	1900
3-Methylcholanthrene	<9.4		9.4
Methyl methanesulfonate	<9.4	*	9.4
2-Methylnaphthalene	<9.4		9.4
Methyl parathion	<9.4		9.4
2-Methylphenol	<9.4		9.4
3 & 4 Methylphenol	<9.4		9.4
Naphthalene	<9.4		9.4
1,4-Naphthoquinone	<9.4		9.4
1-Naphthylamine	<9.4	*	9.4
2-Naphthylamine	<9.4		9.4
2-Nitroaniline	<47		47
3-Nitroaniline	<47		47
4-Nitroaniline	<47		47
Nitrobenzene	<9.4		9.4
2-Nitrophenol	<9.4		9.4
4-Nitrophenol	<47		47
4-Nitroquinoline-1-oxide	<19		19
N-Nitro-o-toluidine	<9.4		9.4
N-Nitrosodiethylamine	<9.4		9.4
N-Nitrosodimethylamine	<9.4		9.4
N-Nitrosodi-n-butylamine	<9.4		9.4
N-Nitrosodi-n-propylamine	<9.4		9.4
N-Nitrosodiphenylamine	<9.4		9.4
N-Nitrosomethylalkylamine	<9.4		9.4

Analytical Data

Client: Ashland Inc.

Job Number: 680-51170-1

Client Sample ID: RB

Lab Sample ID: 680-51170-2RB

Client Matrix: Water

Date Sampled: 09/28/2009 1745

Date Received: 09/30/2009 0853

8270C Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)

Method:	8270C	Analysis Batch: 680-149819	Instrument ID: MST
Preparation:	3520C	Prep Batch: 680-149426	Lab File ID: t3669.d
Dilution:	1.0		Initial Weight/Volume: 1060 mL
Date Analyzed:	10/05/2009 2356		Final Weight/Volume: 1 mL
Date Prepared:	10/01/2009 1512		Injection Volume:

Analyte	Result (ug/L)	Qualifier	RL
N-Nitrosomorpholine	<9.4		9.4
N-Nitrosopiperidine	<9.4		9.4
N-Nitrosopyrrolidine	<9.4		9.4
o,o",o"-Triethylphosphorothioate	<9.4		9.4
p-Dimethylamino azobenzene	<9.4		9.4
Pentachlorobenzene	<9.4		9.4
Pentachloronitrobenzene	<9.4		9.4
Pentachlorophenol	<47		47
Phenacetin	<9.4		9.4
Phenanthrene	<9.4		9.4
Phenol	<9.4		9.4
Phorate	<9.4		9.4
2-Picoline	<9.4	*	9.4
p-Phenylenediamine	<1900	*	1900
Pronamide	<9.4		9.4
Pyrene	<9.4		9.4
Pyridine	<47	*	47
Safrole, Total	<9.4		9.4
Sulfotep	<9.4		9.4
1,2,4,5-Tetrachlorobenzene	<9.4		9.4
2,3,4,6-Tetrachlorophenol	<9.4		9.4
Thionazin	<9.4		9.4
2-Toluidine	<9.4		9.4
1,2,4-Trichlorobenzene	<9.4		9.4
2,4,5-Trichlorophenol	<9.4		9.4
2,4,6-Trichlorophenol	<9.4		9.4
1,3,5-Trinitrobenzene	<9.4		9.4
Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	81		40 - 139
2-Fluorobiphenyl	77		50 - 113
2-Fluorophenol	69		36 - 110
Terphenyl-d14	75		10 - 121
Phenol-d5	65		38 - 116
Nitrobenzene-d5	73		45 - 112

Analytical Data

Client: Ashland Inc.

Job Number: 680-51170-1

Client Sample ID: RB

Lab Sample ID: 680-51170-2RB

Client Matrix: Water

Date Sampled: 09/28/2009 1745

Date Received: 09/30/2009 0853

8270C Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)

Method:	8270C	Analysis Batch:	680-151289	Instrument ID:	MSG
Preparation:	3520C	Prep Batch:	680-150728	Lab File ID:	g5656.d
Dilution:	1.0			Initial Weight/Volume:	1050 mL
Date Analyzed:	10/21/2009 1433	Run Type:	RE	Final Weight/Volume:	1 mL
Date Prepared:	10/16/2009 1358			Injection Volume:	

Analyte	Result (ug/L)	Qualifier	RL
Acenaphthene	<9.5	H	9.5
Acenaphthylene	<9.5	H	9.5
Acetophenone	<9.5	H	9.5
2-Acetylaminofluorene	<9.5	H	9.5
alpha,alpha-Dimethyl phenethylamine	<1900	H	1900
4-Aminobiphenyl	<9.5	H	9.5
Aniline	<19	H	19
Anthracene	<9.5	H	9.5
Aramite, Total	<9.5	H	9.5
Benzo[a]anthracene	<9.5	H	9.5
Benzo[a]pyrene	<9.5	H	9.5
Benzo[b]fluoranthene	<9.5	H	9.5
Benzo[g,h,i]perylene	<9.5	H	9.5
Benzo[k]fluoranthene	<9.5	H	9.5
Benzyl alcohol	<9.5	H	9.5
1,1'-Biphenyl	<9.5	H	9.5
Bis(2-chloroethoxy)methane	<9.5	H	9.5
Bis(2-chloroethyl)ether	<9.5	H	9.5
bis(chloroisopropyl) ether	<9.5	H	9.5
Bis(2-ethylhexyl) phthalate	<9.5	H	9.5
4-Bromophenyl phenyl ether	<9.5	H	9.5
Butyl benzyl phthalate	<9.5	H	9.5
4-Chloroaniline	<19	H	19
4-Chloro-3-methylphenol	<9.5	H	9.5
2-Chloronaphthalene	<9.5	H	9.5
2-Chlorophenol	<9.5	H	9.5
4-Chlorophenyl phenyl ether	<9.5	H	9.5
Chrysene	<9.5	H	9.5
Diallate	<9.5	H	9.5
Dibenz(a,h)anthracene	<9.5	H	9.5
Dibenzofuran	<9.5	H	9.5
1,2-Dichlorobenzene	<9.5	H	9.5
1,3-Dichlorobenzene	<9.5	H	9.5
1,4-Dichlorobenzene	<9.5	H	9.5
3,3'-Dichlorobenzidine	<19	H	19
2,4-Dichlorophenol	<9.5	H	9.5
2,6-Dichlorophenol	<9.5	H	9.5
Diethyl phthalate	<9.5	H	9.5
Dimethoate	<9.5	H	9.5
7,12-Dimethylbenz(a)anthracene	<9.5	H	9.5
3,3'-Dimethylbenzidine	<19	H	19
2,4-Dimethylphenol	<9.5	H	9.5
Dimethyl phthalate	<9.5	H	9.5
Di-n-butyl phthalate	<9.5	H	9.5
1,3-Dinitrobenzene	<9.5	H	9.5
4,6-Dinitro-2-methylphenol	<48	H	48

Analytical Data

Client: Ashland Inc.

Job Number: 680-51170-1

Client Sample ID: RB

Lab Sample ID: 680-51170-2RB

Client Matrix: Water

Date Sampled: 09/28/2009 1745

Date Received: 09/30/2009 0853

8270C Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)

Method:	8270C	Analysis Batch:	680-151289	Instrument ID:	MSG
Preparation:	3520C	Prep Batch:	680-150728	Lab File ID:	g5656.d
Dilution:	1.0			Initial Weight/Volume:	1050 mL
Date Analyzed:	10/21/2009 1433	Run Type:	RE	Final Weight/Volume:	1 mL
Date Prepared:	10/16/2009 1358			Injection Volume:	

Analyte	Result (ug/L)	Qualifier	RL
2,4-Dinitrophenol	<48	H	48
2,4-Dinitrotoluene	<9.5	H	9.5
2,6-Dinitrotoluene	<9.5	H	9.5
Di-n-octyl phthalate	<9.5	H	9.5
Dinoseb	<9.5	H	9.5
1,4-Dioxane	<9.5	H	9.5
Disulfoton	<9.5	H	9.5
Ethyl methanesulfonate	<9.5	H	9.5
Ethyl Parathion	<9.5	H	9.5
Famphur	<9.5	H *	9.5
Fluoranthene	<9.5	H	9.5
Fluorene	<9.5	H	9.5
Hexachlorobenzene	<9.5	H	9.5
Hexachlorobutadiene	<9.5	H	9.5
Hexachlorocyclopentadiene	<9.5	H	9.5
Hexachloroethane	<9.5	H	9.5
Hexachlorophene	<4800	H	4800
Hexachloropropene	<9.5	H	9.5
Indeno[1,2,3-cd]pyrene	<9.5	H	9.5
Isophorone	<9.5	H	9.5
Isosafrole	<9.5	H	9.5
Methapyrilene	<1900	H	1900
3-Methylcholanthrene	<9.5	H	9.5
Methyl methanesulfonate	<9.5	H *	9.5
2-Methylnaphthalene	<9.5	H	9.5
Methyl parathion	<9.5	H	9.5
2-Methylphenol	<9.5	H	9.5
3 & 4 Methylphenol	<9.5	H	9.5
Naphthalene	<9.5	H	9.5
1,4-Naphthoquinone	<9.5	H *	9.5
1-Naphthylamine	<9.5	H *	9.5
2-Naphthylamine	<9.5	H	9.5
2-Nitroaniline	<48	H	48
3-Nitroaniline	<48	H	48
4-Nitroaniline	<48	H	48
Nitrobenzene	<9.5	H	9.5
2-Nitrophenol	<9.5	H	9.5
4-Nitrophenol	<48	H	48
4-Nitroquinoline-1-oxide	<19	H	19
N-Nitro-o-toluidine	<9.5	H	9.5
N-Nitrosodiethylamine	<9.5	H	9.5
N-Nitrosodimethylamine	<9.5	H	9.5
N-Nitrosodi-n-butylamine	<9.5	H	9.5
N-Nitrosodi-n-propylamine	<9.5	H	9.5
N-Nitrosodiphenylamine	<9.5	H	9.5
N-Nitrosomethylethlamine	<9.5	H	9.5

Analytical Data

Client: Ashland Inc.

Job Number: 680-51170-1

Client Sample ID: RB

Lab Sample ID: 680-51170-2RB

Client Matrix: Water

Date Sampled: 09/28/2009 1745

Date Received: 09/30/2009 0853

8270C Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)

Method:	8270C	Analysis Batch:	680-151289	Instrument ID:	MSG
Preparation:	3520C	Prep Batch:	680-150728	Lab File ID:	g5656.d
Dilution:	1.0			Initial Weight/Volume:	1050 mL
Date Analyzed:	10/21/2009 1433	Run Type:	RE	Final Weight/Volume:	1 mL
Date Prepared:	10/16/2009 1358			Injection Volume:	

Analyte	Result (ug/L)	Qualifier	RL
N-Nitrosomorpholine	<9.5	H	9.5
N-Nitrosopiperidine	<9.5	H	9.5
N-Nitrosopyrrolidine	<9.5	H	9.5
o,o',o"-Triethylphosphorothioate	<9.5	H	9.5
p-Dimethylamino azobenzene	<9.5	H	9.5
Pentachlorobenzene	<9.5	H	9.5
Pentachloronitrobenzene	<9.5	H	9.5
Pentachlorophenol	<48	H	48
Phenacetin	<9.5	H	9.5
Phenanthrene	<9.5	H	9.5
Phenol	<9.5	H	9.5
Phorate	<9.5	H	9.5
2-Picoline	<9.5	H	9.5
p-Phenylenediamine	<1900	H	1900
Pronamide	<9.5	H	9.5
Pyrene	<9.5	H	9.5
Pyridine	<48	H	48
Safrole, Total	<9.5	H	9.5
Sulfotep	<9.5	H	9.5
1,2,4,5-Tetrachlorobenzene	<9.5	H	9.5
2,3,4,6-Tetrachlorophenol	<9.5	H	9.5
Thionazin	<9.5	H	9.5
2-Toluidine	<9.5	H	9.5
1,2,4-Trichlorobenzene	<9.5	H	9.5
2,4,5-Trichlorophenol	<9.5	H	9.5
2,4,6-Trichlorophenol	<9.5	H	9.5
1,3,5-Trinitrobenzene	<9.5	H	9.5

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	76		40 - 139
2-Fluorobiphenyl	74		50 - 113
2-Fluorophenol	71		36 - 110
Terphenyl-d14	80		10 - 121
Phenol-d5	74		38 - 116
Nitrobenzene-d5	76		45 - 112

Analytical Data

Client: Ashland Inc.

Job Number: 680-51170-1

Client Sample ID: MW-20

Lab Sample ID: 680-51170-3

Client Matrix: Water

Date Sampled: 09/29/2009 0720

Date Received: 09/30/2009 0853

8270C Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)

Method:	8270C	Analysis Batch: 680-151231	Instrument ID:	MSG
Preparation:	3520C	Prep Batch: 680-150728	Lab File ID:	g5635.d
Dilution:	1.0		Initial Weight/Volume:	1050 mL
Date Analyzed:	10/20/2009 1356	Run Type: RE	Final Weight/Volume:	1 mL
Date Prepared:	10/16/2009 1358		Injection Volume:	

Analyte	Result (ug/L)	Qualifier	RL
Acenaphthene	<9.5	H	9.5
Acenaphthylene	<9.5	H	9.5
Acetophenone	<9.5	H	9.5
2-Acetylaminofluorene	<9.5	H	9.5
alpha,alpha-Dimethyl phenethylamine	<1900	H	1900
4-Aminobiphenyl	<9.5	H	9.5
Aniline	<19	H	19
Anthracene	<9.5	H	9.5
Aramite, Total	<9.5	H	9.5
Benzo[a]anthracene	<9.5	H	9.5
Benzo[a]pyrene	<9.5	H	9.5
Benzo[b]fluoranthene	<9.5	H	9.5
Benzo[g,h,i]perylene	<9.5	H	9.5
Benzo[k]fluoranthene	<9.5	H	9.5
Benzyl alcohol	<9.5	H	9.5
1,1'-Biphenyl	<9.5	H	9.5
Bis(2-chloroethoxy)methane	<9.5	H	9.5
Bis(2-chloroethyl)ether	<9.5	H	9.5
bis(chloroisopropyl) ether	<9.5	H	9.5
Bis(2-ethylhexyl) phthalate	<9.5	H	9.5
4-Bromophenyl phenyl ether	<9.5	H	9.5
Butyl benzyl phthalate	<9.5	H	19
4-Chloroaniline	<19	H	9.5
4-Chloro-3-methylphenol	<9.5	H	9.5
2-Chloronaphthalene	<9.5	H	9.5
2-Chlorophenol	<9.5	H	9.5
4-Chlorophenyl phenyl ether	<9.5	H	9.5
Chrysene	<9.5	H	9.5
Diallate	<9.5	H	9.5
Dibenz(a,h)anthracene	<9.5	H	9.5
Dibenzofuran	<9.5	H	9.5
1,2-Dichlorobenzene	<9.5	H	9.5
1,3-Dichlorobenzene	<9.5	H	9.5
1,4-Dichlorobenzene	<9.5	H	19
3,3'-Dichlorobenzidine	<19	H	9.5
2,4-Dichlorophenol	<9.5	H	9.5
2,6-Dichlorophenol	<9.5	H	9.5
Diethyl phthalate	<9.5	H	9.5
Dimethoate	<9.5	H	9.5
7,12-Dimethylbenz(a)anthracene	<9.5	H	19
3,3'-Dimethylbenzidine	<19	H	9.5
2,4-Dimethylphenol	<9.5	H	9.5
Dimethyl phthalate	<9.5	H	9.5
Di-n-butyl phthalate	<9.5	H	9.5
1,3-Dinitrobenzene	<9.5	H	48
4,6-Dinitro-2-methylphenol	<48	H	

Analytical Data

Client: Ashland Inc.

Job Number: 680-51170-1

Client Sample ID: MW-20

Lab Sample ID: 680-51170-3

Date Sampled: 09/29/2009 0720

Client Matrix: Water

Date Received: 09/30/2009 0853

8270C Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)

Method:	8270C	Analysis Batch:	680-151231	Instrument ID:	MSG
Preparation:	3520C	Prep Batch:	680-150728	Lab File ID:	g5635.d
Dilution:	1.0			Initial Weight/Volume:	1050 mL
Date Analyzed:	10/20/2009 1356	Run Type:	RE	Final Weight/Volume:	1 mL
Date Prepared:	10/16/2009 1358			Injection Volume:	

Analyte	Result (ug/L)	Qualifier	RL
2,4-Dinitrophenol	<48	H	48
2,4-Dinitrotoluene	<9.5	H	9.5
2,6-Dinitrotoluene	<9.5	H	9.5
Di-n-octyl phthalate	<9.5	H	9.5
Dinoseb	<9.5	H	9.5
1,4-Dioxane	<9.5	H	9.5
Disulfoton	<9.5	H	9.5
Ethyl methanesulfonate	<9.5	H	9.5
Ethyl Parathion	<9.5	H	9.5
Famphur	<9.5	H *	9.5
Fluoranthene	<9.5	H	9.5
Fluorene	<9.5	H	9.5
Hexachlorobenzene	<9.5	H	9.5
Hexachlorobutadiene	<9.5	H	9.5
Hexachlorocyclopentadiene	<9.5	H	9.5
Hexachloroethane	<9.5	H	9.5
Hexachlorophene	<4800	H	4800
Hexachloropropene	<9.5	H	9.5
Indeno[1,2,3-cd]pyrene	<9.5	H	9.5
Isophorone	<9.5	H	9.5
Isosafrole	<9.5	H	9.5
Methapyrilene	<1900	H	1900
3-Methylcholanthrene	<9.5	H	9.5
Methyl methanesulfonate	<9.5	H *	9.5
2-Methylnaphthalene	<9.5	H	9.5
Methyl parathion	<9.5	H	9.5
2-Methylphenol	<9.5	H	9.5
3 & 4 Methylphenol	<9.5	H	9.5
Naphthalene	<9.5	H	9.5
1,4-Naphthoquinone	<9.5	H *	9.5
1-Naphthylamine	<9.5	H *	9.5
2-Naphthylamine	<9.5	H	9.5
2-Nitroaniline	<48	H	48
3-Nitroaniline	<48	H	48
4-Nitroaniline	<48	H	48
Nitrobenzene	<9.5	H	9.5
2-Nitrophenol	<9.5	H	9.5
4-Nitrophenol	<48	H	48
4-Nitroquinoline-1-oxide	<19	H	19
N-Nitro-o-toluidine	<9.5	H	9.5
N-Nitrosodiethylamine	<9.5	H	9.5
N-Nitrosodimethylamine	<9.5	H	9.5
N-Nitrosodi-n-butylamine	<9.5	H	9.5
N-Nitrosodi-n-propylamine	<9.5	H	9.5
N-Nitrosodiphenylamine	<9.5	H	9.5
N-Nitrosomethylethylamine	<9.5	H	9.5

Analytical Data

Client: Ashland Inc.

Job Number: 680-51170-1

Client Sample ID: MW-20

Lab Sample ID: 680-51170-3

Date Sampled: 09/29/2009 0720

Client Matrix: Water

Date Received: 09/30/2009 0853

8270C Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)

Method:	8270C	Analysis Batch:	680-151231	Instrument ID:	MSG
Preparation:	3520C	Prep Batch:	680-150728	Lab File ID:	g5635.d
Dilution:	1.0			Initial Weight/Volume:	1050 mL
Date Analyzed:	10/20/2009 1356	Run Type:	RE	Final Weight/Volume:	1 mL
Date Prepared:	10/16/2009 1358			Injection Volume:	

Analyte	Result (ug/L)	Qualifier	RL
N-Nitrosomorpholine	<9.5	H	9.5
N-Nitrosopiperidine	<9.5	H	9.5
N-Nitrosopyrrolidine	<9.5	H	9.5
o,o',o"-Triethylphosphorothioate	<9.5	H	9.5
p-Dimethylamino azobenzene	<9.5	H	9.5
Pentachlorobenzene	<9.5	H	9.5
Pentachloronitrobenzene	<9.5	H	9.5
Pentachlorophenol	<48	H	48
Phenacetin	<9.5	H	9.5
Phenanthrene	<9.5	H	9.5
Phenol	<9.5	H	9.5
Phorate	<9.5	H	9.5
2-Picoline	<9.5	H	9.5
p-Phenylenediamine	<1900	H	1900
Pronamide	<9.5	H	9.5
Pyrene	<9.5	H	9.5
Pyridine	<48	H	48
Safrole, Total	<9.5	H	9.5
Sulfotep	<9.5	H	9.5
1,2,4,5-Tetrachlorobenzene	<9.5	H	9.5
2,3,4,6-Tetrachlorophenol	<9.5	H	9.5
Thionazin	<9.5	H	9.5
2-Toluidine	<9.5	H	9.5
1,2,4-Trichlorobenzene	<9.5	H	9.5
2,4,5-Trichlorophenol	<9.5	H	9.5
2,4,6-Trichlorophenol	<9.5	H	9.5
1,3,5-Trinitrobenzene	<9.5	H	9.5

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	60		40 - 139
2-Fluorobiphenyl	62		50 - 113
2-Fluorophenol	55		36 - 110
Terphenyl-d14	29		10 - 121
Phenol-d5	56		38 - 116
Nitrobenzene-d5	63		45 - 112

Analytical Data

Client: Ashland Inc.

Job Number: 680-51170-1

Client Sample ID: MW-20

Lab Sample ID: 680-51170-3

Client Matrix: Water

Date Sampled: 09/29/2009 0720

Date Received: 09/30/2009 0853

8270C Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)

Method:	8270C	Analysis Batch:	680-150416	Instrument ID:	MSG
Preparation:	3520C	Prep Batch:	680-149426	Lab File ID:	g5582.d
Dilution:	2.0			Initial Weight/Volume:	1030 mL
Date Analyzed:	10/12/2009 1159			Final Weight/Volume:	1 mL
Date Prepared:	10/01/2009 1512			Injection Volume:	

Analyte	Result (ug/L)	Qualifier	RL
Acenaphthene	<19		19
Acenaphthylene	<19		19
Acetophenone	<19		19
2-Acetylaminofluorene	<19		19
alpha,alpha-Dimethyl phenethylamine	<3900	*	3900
4-Aminobiphenyl	<19		19
Aniline	<39		39
Anthracene	<19		19
Aramite, Total	<19		19
Benzo[a]anthracene	<19		19
Benzo[a]pyrene	<19		19
Benzo[b]fluoranthene	<19		19
Benzo[g,h,i]perylene	<19		19
Benzo[k]fluoranthene	<19		19
Benzyl alcohol	<19		19
1,1'-Biphenyl	<19		19
Bis(2-chloroethoxy)methane	<19	*	19
Bis(2-chloroethyl)ether	<19		19
bis(chloroisopropyl) ether	<19		19
Bis(2-ethylhexyl) phthalate	<19		19
4-Bromophenyl phenyl ether	<19		19
Butyl benzyl phthalate	<19		19
4-Chloroaniline	<39		39
4-Chloro-3-methylphenol	<19		19
2-Chloronaphthalene	<19		19
2-Chlorophenol	<19		19
4-Chlorophenyl phenyl ether	<19		19
Chrysene	<19		19
Diallate	<19		19
Dibenz(a,h)anthracene	<19		19
Dibenzofuran	<19		19
1,2-Dichlorobenzene	<19		19
1,3-Dichlorobenzene	<19		19
1,4-Dichlorobenzene	<19		19
3,3'-Dichlorobenzidine	<39		39
2,4-Dichlorophenol	<19		19
2,6-Dichlorophenol	<19		19
Diethyl phthalate	<19		19
Dimethoate	<19		19
7,12-Dimethylbenz(a)anthracene	<19		19
3,3'-Dimethylbenzidine	<39	*	39
2,4-Dimethylphenol	<19		19
Dimethyl phthalate	<19		19
Di-n-butyl phthalate	<19		19
1,3-Dinitrobenzene	<19		19
4,6-Dinitro-2-methylphenol	<97		97

Analytical Data

Client: Ashland Inc.

Job Number: 680-51170-1

Client Sample ID: MW-20

Lab Sample ID: 680-51170-3

Client Matrix: Water

Date Sampled: 09/29/2009 0720

Date Received: 09/30/2009 0853

8270C Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)

Method:	8270C	Analysis Batch:	680-150416	Instrument ID:	MSG
Preparation:	3520C	Prep Batch:	680-149426	Lab File ID:	g5582.d
Dilution:	2.0			Initial Weight/Volume:	1030 mL
Date Analyzed:	10/12/2009 1159			Final Weight/Volume:	1 mL
Date Prepared:	10/01/2009 1512			Injection Volume:	

Analyte	Result (ug/L)	Qualifier	RL
2,4-Dinitrophenol	<97		97
2,4-Dinitrotoluene	<19		19
2,6-Dinitrotoluene	<19		19
Di-n-octyl phthalate	<19		19
Dinoseb	<19		19
1,4-Dioxane	<19		19
Disulfoton	<19		19
Ethyl methanesulfonate	<19		19
Ethyl Parathion	<19		19
Famphur	<19		19
Fluoranthene	<19		19
Fluorene	<19		19
Hexachlorobenzene	<19		19
Hexachlorobutadiene	<19		19
Hexachlorocyclopentadiene	<19		19
Hexachloroethane	<19		19
Hexachlorophene	<9700		9700
Hexachloropropene	<19		19
Indeno[1,2,3-cd]pyrene	<19		19
Isophorone	<19		19
Isosafrole	<19		19
Methapyriene	<3900	*	3900
3-Methylcholanthrene	<19		19
Methyl methanesulfonate	<19	*	19
2-Methylnaphthalene	<19		19
Methyl parathion	<19		19
2-Methylphenol	<19		19
3 & 4 Methylphenol	<19		19
Naphthalene	<19		19
1,4-Naphthoquinone	<19		19
1-Naphthylamine	<19	*	19
2-Naphthylamine	<19		19
2-Nitroaniline	<97		97
3-Nitroaniline	<97		97
4-Nitroaniline	<97		97
Nitrobenzene	<19		19
2-Nitrophenol	<19		19
4-Nitrophenol	<97		97
4-Nitroquinoline-1-oxide	<39		39
N-Nitro-o-toluidine	<19		19
N-Nitrosodiethylamine	<19		19
N-Nitrosodimethylamine	<19		19
N-Nitrosodi-n-butylamine	<19		19
N-Nitrosodi-n-propylamine	<19		19
N-Nitrosodiphenylamine	<19		19
N-Nitrosomethylalkylamine	<19		19

Analytical Data

Client: Ashland Inc.

Job Number: 680-51170-1

Client Sample ID: MW-20

Lab Sample ID: 680-51170-3

Client Matrix: Water

Date Sampled: 09/29/2009 0720

Date Received: 09/30/2009 0853

8270C Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)

Method:	8270C	Analysis Batch:	680-150416	Instrument ID:	MSG
Preparation:	3520C	Prep Batch:	680-149426	Lab File ID:	g5582.d
Dilution:	2.0			Initial Weight/Volume:	1030 mL
Date Analyzed:	10/12/2009 1159			Final Weight/Volume:	1 mL
Date Prepared:	10/01/2009 1512			Injection Volume:	

Analyte	Result (ug/L)	Qualifier	RL
N-Nitrosomorpholine	<19		19
N-Nitrosopiperidine	<19		19
N-Nitrosopyrrolidine	<19		19
o,o',o"-Triethylphosphorothioate	<19		19
p-Dimethylamino azobenzene	<19		19
Pentachlorobenzene	<19		19
Pentachloronitrobenzene	<19		19
Pentachlorophenol	<97		97
Phenacetin	<19		19
Phenanthrene	<19		19
Phenol	<19		19
Phorate	<19		19
2-Picoline	<19	*	19
p-Phenylenediamine	<3900	*	3900
Pronamide	<19		19
Pyrene	<19		19
Pyridine	<97	*	97
Safrole, Total	<19		19
Sulfotep	<19		19
1,2,4,5-Tetrachlorobenzene	<19		19
2,3,4,6-Tetrachlorophenol	<19		19
Thionazin	<19		19
2-Toluidine	<19		19
1,2,4-Trichlorobenzene	<19		19
2,4,5-Trichlorophenol	<19		19
2,4,6-Trichlorophenol	<19		19
1,3,5-Trinitrobenzene	<19		19

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	121		40 - 139
2-Fluorobiphenyl	101		50 - 113
2-Fluorophenol	112	X	36 - 110
Terphenyl-d14	56		10 - 121
Phenol-d5	110		38 - 116
Nitrobenzene-d5	109		45 - 112

Analytical Data

Client: Ashland Inc.

Job Number: 680-51170-1

Client Sample ID: MW-22

Lab Sample ID: 680-51170-4

Client Matrix: Water

Date Sampled: 09/29/2009 0823

Date Received: 09/30/2009 0853

8270C Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)

Method:	8270C	Analysis Batch: 680-150498	Instrument ID:	MSG
Preparation:	3520C	Prep Batch: 680-149426	Lab File ID:	g5622.d
Dilution:	20		Initial Weight/Volume:	1030 mL
Date Analyzed:	10/14/2009 1232		Final Weight/Volume:	1 mL
Date Prepared:	10/01/2009 1512		Injection Volume:	

Analyte	Result (ug/L)	Qualifier	RL
Acenaphthene	<190		190
Acenaphthylene	<190		190
Acetophenone	<190		190
2-Acetylaminofluorene	<190		190
alpha,alpha-Dimethyl phenethylamine	<39000	*	39000
4-Aminobiphenyl	<190		190
Aniline	<390		390
Anthracene	<190		190
Aramite, Total	<190		190
Benzo[a]anthracene	<190		190
Benzo[a]pyrene	<190		190
Benzo[b]fluoranthene	<190		190
Benzo[g,h,i]perylene	<190		190
Benzo[k]fluoranthene	<190		190
Benzyl alcohol	<190		190
1,1'-Biphenyl	2600		190
Bis(2-chloroethoxy)methane	<190	*	190
Bis(2-chloroethyl)ether	<190		190
bis(chloroisopropyl) ether	<190		190
Bis(2-ethylhexyl) phthalate	<190		190
4-Bromophenyl phenyl ether	<190		190
Butyl benzyl phthalate	<190		390
4-Chloroaniline	<390		190
4-Chloro-3-methylphenol	<190		190
2-Chloronaphthalene	<190		190
2-Chlorophenol	<190		190
4-Chlorophenyl phenyl ether	<190		190
Chrysene	<190		190
Diallate	<190		190
Dibenz(a,h)anthracene	<190		190
Dibenzofuran	<190		190
1,2-Dichlorobenzene	<190		190
1,3-Dichlorobenzene	<190		190
1,4-Dichlorobenzene	<190		390
3,3'-Dichlorobenzidine	<390		190
2,4-Dichlorophenol	<190		190
2,6-Dichlorophenol	<190		190
Diethyl phthalate	<190		190
Dimethoate	<190		190
7,12-Dimethylbenz(a)anthracene	<190	*	390
3,3'-Dimethylbenzidine	<390		190
2,4-Dimethylphenol	<190		190
Dimethyl phthalate	<190		190
Di-n-butyl phthalate	<190		190
1,3-Dinitrobenzene	<190		190
4,6-Dinitro-2-methylphenol	<970		970

Analytical Data

Client: Ashland Inc.

Job Number: 680-51170-1

Client Sample ID: MW-22

Lab Sample ID: 680-51170-4

Client Matrix: Water

Date Sampled: 09/29/2009 0823

Date Received: 09/30/2009 0853

8270C Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)

Method:	8270C	Analysis Batch:	680-150498	Instrument ID:	MSG
Preparation:	3520C	Prep Batch:	680-149426	Lab File ID:	g5622.d
Dilution:	20			Initial Weight/Volume:	1030 mL
Date Analyzed:	10/14/2009 1232			Final Weight/Volume:	1 mL
Date Prepared:	10/01/2009 1512			Injection Volume:	

Analyte	Result (ug/L)	Qualifier	RL
2,4-Dinitrophenol	<970		970
2,4-Dinitrotoluene	<190		190
2,6-Dinitrotoluene	<190		190
Di-n-octyl phthalate	<190		190
Dinoseb	<190		190
1,4-Dioxane	<190		190
Disulfoton	<190		190
Ethyl methanesulfonate	<190		190
Ethyl Parathion	<190		190
Famphur	<190		190
Fluoranthene	<190		190
Fluorene	<190		190
Hexachlorobenzene	<190		190
Hexachlorobutadiene	<190		190
Hexachlorocyclopentadiene	<190		190
Hexachloroethane	<190		190
Hexachlorophene	<97000		97000
Hexachloropropene	<190		190
Indeno[1,2,3-cd]pyrene	<190		190
Isophorone	<190		190
Isosafrole	<190		190
Methapyriene	<39000	*	39000
3-Methylcholanthrene	<190		190
Methyl methanesulfonate	<190	*	190
2-Methylnaphthalene	<190		190
Methyl parathion	<190		190
2-Methylphenol	<190		190
3 & 4 Methylphenol	<190		190
Naphthalene	<190		190
1,4-Naphthoquinone	<190		190
1-Naphthylamine	<190	*	190
2-Naphthylamine	<190		190
2-Nitroaniline	<970		970
3-Nitroaniline	<970		970
4-Nitroaniline	<970		970
Nitrobenzene	<190		190
2-Nitrophenol	<190		190
4-Nitrophenol	<970		970
4-Nitroquinoline-1-oxide	<390		390
N-Nitro-o-toluidine	<190		190
N-Nitrosodiethylamine	<190		190
N-Nitrosodimethylamine	<190		190
N-Nitrosodi-n-butylamine	<190		190
N-Nitrosodi-n-propylamine	<190		190
N-Nitrosodiphenylamine	<190		190
N-Nitrosomethylalkylamine	<190		190

Analytical Data

Client: Ashland Inc.

Job Number: 680-51170-1

Client Sample ID: MW-22

Lab Sample ID: 680-51170-4

Client Matrix: Water

Date Sampled: 09/29/2009 0823

Date Received: 09/30/2009 0853

8270C Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)

Method:	8270C	Analysis Batch: 680-150498	Instrument ID: MSG
Preparation:	3520C	Prep Batch: 680-149426	Lab File ID: g5622.d
Dilution:	20		Initial Weight/Volume: 1030 mL
Date Analyzed:	10/14/2009 1232		Final Weight/Volume: 1 mL
Date Prepared:	10/01/2009 1512		Injection Volume:

Analyte	Result (ug/L)	Qualifier	RL
N-Nitrosomorpholine	<190		190
N-Nitrosopiperidine	<190		190
N-Nitrosopyrrolidine	<190		190
o,o',o"-Triethylphosphorothioate	<190		190
p-Dimethylamino azobenzene	<190		190
Pentachlorobenzene	<190		190
Pentachloronitrobenzene	<190		970
Pentachlorophenol	<970		190
Phenacetin	<190		190
Phenanthrene	<190		190
Phenol	2000		190
Phorate	<190		190
2-Picoline	<190	*	39000
p-Phenylenediamine	<39000	*	190
Pronamide	<190		190
Pyrene	<190		970
Pyridine	<970	*	190
Safrole, Total	<190		190
Sulfotep	<190		190
1,2,4,5-Tetrachlorobenzene	<190		190
2,3,4,6-Tetrachlorophenol	<190		190
Thionazin	<190		190
2-Toluidine	<190		190
1,2,4-Trichlorobenzene	<190		190
2,4,5-Trichlorophenol	<190		190
2,4,6-Trichlorophenol	<190		190
1,3,5-Trinitrobenzene	<190		190

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	0	D	40 - 139
2-Fluorobiphenyl	0	D	50 - 113
2-Fluorophenol	0	D	36 - 110
Terphenyl-d14	0	D	10 - 121
Phenol-d5	0	D	38 - 116
Nitrobenzene-d5	0	D	45 - 112

Analytical Data

Client: Ashland Inc.

Job Number: 680-51170-1

Client Sample ID: MW-22

Lab Sample ID: 680-51170-4

Client Matrix: Water

Date Sampled: 09/29/2009 0823

Date Received: 09/30/2009 0853

8270C Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)

Method:	8270C	Analysis Batch:	680-151289	Instrument ID:	MSG
Preparation:	3520C	Prep Batch:	680-150728	Lab File ID:	g5657.d
Dilution:	25			Initial Weight/Volume:	1030 mL
Date Analyzed:	10/21/2009 1456	Run Type:	RE	Final Weight/Volume:	1 mL
Date Prepared:	10/16/2009 1358			Injection Volume:	

Analyte	Result (ug/L)	Qualifier	RL
Acenaphthene	<240	H	240
Acenaphthylene	<240	H	240
Acetophenone	<240	H	240
2-Acetylaminofluorene	<240	H	240
alpha,alpha-Dimethyl phenethylamine	<49000	H	49000
4-Aminobiphenyl	<240	H	240
Aniline	<490	H	490
Anthracene	<240	H	240
Aramite, Total	<240	H	240
Benzo[a]anthracene	<240	H	240
Benzo[a]pyrene	<240	H	240
Benzo[b]fluoranthene	<240	H	240
Benzo[g,h,i]perylene	<240	H	240
Benzo[k]fluoranthene	<240	H	240
Benzyl alcohol	<240	H	240
1,1'-Biphenyl	<240	H	240
Bis(2-chloroethoxy)methane	<240	H	240
Bis(2-chloroethyl)ether	<240	H	240
bis(chloroisopropyl) ether	<240	H	240
Bis(2-ethylhexyl) phthalate	<240	H	240
4-Bromophenyl phenyl ether	<240	H	240
Butyl benzyl phthalate	<240	H	240
4-Chloroaniline	<490	H	490
4-Chloro-3-methylphenol	<240	H	240
2-Chloronaphthalene	<240	H	240
2-Chlorophenol	<240	H	240
4-Chlorophenyl phenyl ether	<240	H	240
Chrysene	<240	H	240
Diallate	<240	H	240
Dibenz(a,h)anthracene	<240	H	240
Dibenzofuran	<240	H	240
1,2-Dichlorobenzene	<240	H	240
1,3-Dichlorobenzene	<240	H	240
1,4-Dichlorobenzene	<240	H	240
3,3'-Dichlorobenzidine	<490	H	490
2,4-Dichlorophenol	<240	H	240
2,6-Dichlorophenol	<240	H	240
Diethyl phthalate	<240	H	240
Dimethoate	<240	H	240
7,12-Dimethylbenz(a)anthracene	<240	H	240
3,3'-Dimethylbenzidine	<490	H	490
2,4-Dimethylphenol	<240	H	240
Dimethyl phthalate	<240	H	240
Di-n-butyl phthalate	<240	H	240
1,3-Dinitrobenzene	<240	H	240
4,6-Dinitro-2-methylphenol	<1200	H	1200

Analytical Data

Client: Ashland Inc.

Job Number: 680-51170-1

Client Sample ID: MW-22

Lab Sample ID: 680-51170-4

Client Matrix: Water

Date Sampled: 09/29/2009 0823

Date Received: 09/30/2009 0853

8270C Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)

Method:	8270C	Analysis Batch: 680-151289	Instrument ID:	MSG
Preparation:	3520C	Prep Batch: 680-150728	Lab File ID:	g5657.d
Dilution:	25		Initial Weight/Volume:	1030 mL
Date Analyzed:	10/21/2009 1456	Run Type: RE	Final Weight/Volume:	1 mL
Date Prepared:	10/16/2009 1358		Injection Volume:	

Analyte	Result (ug/L)	Qualifier	RL
2,4-Dinitrophenol	<1200	H	1200
2,4-Dinitrotoluene	<240	H	240
2,6-Dinitrotoluene	<240	H	240
Di-n-octyl phthalate	<240	H	240
Dinoseb	<240	H	240
1,4-Dioxane	<240	H	240
Disulfoton	<240	H	240
Ethyl methanesulfonate	<240	H	240
Ethyl Parathion	<240	H	240
Famphur	<240	H *	240
Fluoranthene	<240	H	240
Fluorene	<240	H	240
Hexachlorobenzene	<240	H	240
Hexachlorobutadiene	<240	H	240
Hexachlorocyclopentadiene	<240	H	240
Hexachloroethane	<240	H	240
Hexachlorophene	<120000	H	120000
Hexachloropropene	<240	H	240
Indeno[1,2,3-cd]pyrene	<240	H	240
Isophorone	<240	H	240
Isosafrole	<240	H	49000
Methapyrilene	<49000	H	240
3-Methylcholanthrene	<240	H	240
Methyl methanesulfonate	<240	H *	240
2-Methylnaphthalene	<240	H	240
Methyl parathion	<240	H	240
2-Methylphenol	<240	H	240
3 & 4 Methylphenol	<240	H	240
Naphthalene	<240	H	240
1,4-Naphthoquinone	<240	H *	240
1-Naphthylamine	<240	H *	240
2-Naphthylamine	<240	H	240
2-Nitroaniline	<1200	H	1200
3-Nitroaniline	<1200	H	1200
4-Nitroaniline	<1200	H	1200
Nitrobenzene	<240	H	240
2-Nitrophenol	<240	H	240
4-Nitrophenol	<1200	H	1200
4-Nitroquinoline-1-oxide	<490	H	490
N-Nitro-o-toluidine	<240	H	240
N-Nitrosodiethylamine	<240	H	240
N-Nitrosodimethylamine	<240	H	240
N-Nitrosodi-n-butylamine	<240	H	240
N-Nitrosodi-n-propylamine	<240	H	240
N-Nitrosodiphenylamine	<240	H	240
N-Nitrosomethylethlamine	<240	H	240

Analytical Data

Client: Ashland Inc.

Job Number: 680-51170-1

Client Sample ID: MW-22

Lab Sample ID: 680-51170-4

Client Matrix: Water

Date Sampled: 09/29/2009 0823

Date Received: 09/30/2009 0853

8270C Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)

Method:	8270C	Analysis Batch:	680-151289	Instrument ID:	MSG
Preparation:	3520C	Prep Batch:	680-150728	Lab File ID:	g5657.d
Dilution:	25			Initial Weight/Volume:	1030 mL
Date Analyzed:	10/21/2009 1456	Run Type:	RE	Final Weight/Volume:	1 mL
Date Prepared:	10/16/2009 1358			Injection Volume:	

Analyte	Result (ug/L)	Qualifier	RL
N-Nitrosomorpholine	<240	H	240
N-Nitrosopiperidine	<240	H	240
N-Nitrosopyrrolidine	<240	H	240
o,o",o"-Triethylphosphorothioate	<240	H	240
p-Dimethylamino azobenzene	<240	H	240
Pentachlorobenzene	<240	H	240
Pentachloronitrobenzene	<240	H	240
Pentachlorophenol	<1200	H	1200
Phenacetin	<240	H	240
Phenanthrene	<240	H	240
Phenol	4600	H	240
Phorate	<240	H	240
2-Picoline	<240	H	240
p-Phenylenediamine	<49000	H	49000
Pronamide	<240	H	240
Pyrene	<240	H	240
Pyridine	<1200	H	1200
Safrole, Total	<240	H	240
Sulfotep	<240	H	240
1,2,4,5-Tetrachlorobenzene	<240	H	240
2,3,4,6-Tetrachlorophenol	<240	H	240
Thionazin	<240	H	240
2-Toluidine	<240	H	240
1,2,4-Trichlorobenzene	<240	H	240
2,4,5-Trichlorophenol	<240	H	240
2,4,6-Trichlorophenol	<240	H	240
1,3,5-Trinitrobenzene	<240	H	240
Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	0	D	40 - 139
2-Fluorobiphenyl	0	D	50 - 113
2-Fluorophenol	0	D	36 - 110
Terphenyl-d14	0	D	10 - 121
Phenol-d5	0	D	38 - 116
Nitrobenzene-d5	0	D	45 - 112

Analytical Data

Client: Ashland Inc.

Job Number: 680-51170-1

Client Sample ID: MW-23

Lab Sample ID: 680-51170-5

Client Matrix: Water

Date Sampled: 09/29/2009 0945

Date Received: 09/30/2009 0853

8270C Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)

Method:	8270C	Analysis Batch:	680-150417	Instrument ID:	MSG
Preparation:	3520C	Prep Batch:	680-149426	Lab File ID:	g5607.d
Dilution:	10			Initial Weight/Volume:	1030 mL
Date Analyzed:	10/13/2009 1412			Final Weight/Volume:	1 mL
Date Prepared:	10/01/2009 1512			Injection Volume:	

Analyte	Result (ug/L)	Qualifier	RL
Acenaphthene	<97		97
Acenaphthylene	<97		97
Acetophenone	<97		97
2-Acetylaminofluorene	<97		97
alpha,alpha-Dimethyl phenethylamine	<19000		19000
4-Aminobiphenyl	<97		97
Aniline	<190		190
Anthracene	<97		97
Aramite, Total	<97		97
Benzo[a]anthracene	<97		97
Benzo[a]pyrene	<97		97
Benzo[b]fluoranthene	<97		97
Benzo[g,h,i]perylene	<97		97
Benzo[k]fluoranthene	<97		97
Benzyl alcohol	<97		97
1,1'-Biphenyl	260		97
Bis(2-chloroethoxy)methane	<97		97
Bis(2-chloroethyl)ether	<97		97
bis(chloroisopropyl) ether	<97		97
Bis(2-ethylhexyl) phthalate	<97		97
4-Bromophenyl phenyl ether	<97		97
Butyl benzyl phthalate	<97		97
4-Chloroaniline	<190		190
4-Chloro-3-methylphenol	<97		97
2-Choronaphthalene	<97		97
2-Chlorophenol	<97		97
4-Chlorophenyl phenyl ether	<97		97
Chrysene	<97		97
Diallate	<97		97
Dibenz(a,h)anthracene	<97		97
Dibenzofuran	<97		97
1,2-Dichlorobenzene	<97		97
1,3-Dichlorobenzene	<97		97
1,4-Dichlorobenzene	<97		97
3,3'-Dichlorobenzidine	<190		190
2,4-Dichlorophenol	<97		97
2,6-Dichlorophenol	<97		97
Diethyl phthalate	<97		97
Dimethoate	<97		97
7,12-Dimethylbenz(a)anthracene	<97		97
3,3'-Dimethylbenzidine	<190		190
2,4-Dimethylphenol	<97		97
Dimethyl phthalate	<97		97
Di-n-butyl phthalate	<97		97
1,3-Dinitrobenzene	<97		97
4,6-Dinitro-2-methylphenol	<490		490

Analytical Data

Client: Ashland Inc.

Job Number: 680-51170-1

Client Sample ID: MW-23

Lab Sample ID: 680-51170-5

Client Matrix: Water

Date Sampled: 09/29/2009 0945

Date Received: 09/30/2009 0853

8270C Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)

Method:	8270C	Analysis Batch:	680-150417	Instrument ID:	MSG
Preparation:	3520C	Prep Batch:	680-149426	Lab File ID:	g5607.d
Dilution:	10			Initial Weight/Volume:	1030 mL
Date Analyzed:	10/13/2009 1412			Final Weight/Volume:	1 mL
Date Prepared:	10/01/2009 1512			Injection Volume:	

Analyte	Result (ug/L)	Qualifier	RL
2,4-Dinitrophenol	<490		490
2,4-Dinitrotoluene	<97		97
2,6-Dinitrotoluene	<97		97
Di-n-octyl phthalate	<97		97
Dinoseb	<97		97
1,4-Dioxane	790		97
Disulfoton	<97		97
Ethyl methanesulfonate	<97		97
Ethyl Parathion	<97		97
Famphur	<97		97
Fluoranthene	<97		97
Fluorene	<97		97
Hexachlorobenzene	<97		97
Hexachlorobutadiene	<97		97
Hexachlorocyclopentadiene	<97		97
Hexachloroethane	<97		97
Hexachlorophene	<49000		49000
Hexachloropropene	<97		97
Indeno[1,2,3-cd]pyrene	<97		97
Isophorone	<97		97
Isosafrole	<97		97
Methapyriene	<19000		19000
3-Methylcholanthrene	<97		97
Methyl methanesulfonate	<97		97
2-Methylnaphthalene	<97		97
Methyl parathion	<97		97
2-Methylphenol	<97		97
3 & 4 Methylphenol	490		97
Naphthalene	<97		97
1,4-Naphthoquinone	<97		97
1-Naphthylamine	<97		97
2-Naphthylamine	<97		97
2-Nitroaniline	<490		490
3-Nitroaniline	<490		490
4-Nitroaniline	<490		490
Nitrobenzene	<97		490
2-Nitrophenol	<97		97
4-Nitrophenol	<490		97
4-Nitroquinoline-1-oxide	<190		490
N-Nitro-o-toluidine	<97		190
N-Nitrosodiethylamine	<97		97
N-Nitrosodimethylamine	<97		97
N-Nitrosodi-n-butylamine	<97		97
N-Nitrosodi-n-propylamine	<97		97
N-Nitrosodiphenylamine	<97		97
N-Nitrosomethylalkylamine	<97		97

Analytical Data

Client: Ashland Inc.

Job Number: 680-51170-1

Client Sample ID: MW-23

Lab Sample ID: 680-51170-5

Client Matrix: Water

Date Sampled: 09/29/2009 0945

Date Received: 09/30/2009 0853

8270C Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)

Method:	8270C	Analysis Batch: 680-150417	Instrument ID:	MSG
Preparation:	3520C	Prep Batch: 680-149426	Lab File ID:	g5607.d
Dilution:	10		Initial Weight/Volume:	1030 mL
Date Analyzed:	10/13/2009 1412		Final Weight/Volume:	1 mL
Date Prepared:	10/01/2009 1512		Injection Volume:	

Analyte	Result (ug/L)	Qualifier	RL
N-Nitrosomorpholine	<97		97
N-Nitrosopiperidine	<97		97
N-Nitrosopyrrolidine	<97		97
o,o',o"-Triethylphosphorothioate	<97		97
p-Dimethylamino azobenzene	<97		97
Pentachlorobenzene	<97		97
Pentachloronitrobenzene	<97		97
Pentachlorophenol	<490		490
Phenacetin	<97		97
Phenanthrene	<97		97
Phenol	180		97
Phorate	<97		97
2-Picoline	<97		97
p-Phenylenediamine	<19000		19000
Pronamide	<97		97
Pyrene	<97		97
Pyridine	<490		490
Safrole, Total	<97		97
Sulfotep	<97		97
1,2,4,5-Tetrachlorobenzene	<97		97
2,3,4,6-Tetrachlorophenol	<97		97
Thionazin	<97		97
2-Toluidine	<97		97
1,2,4-Trichlorobenzene	<97		97
2,4,5-Trichlorophenol	<97		97
2,4,6-Trichlorophenol	<97		97
1,3,5-Trinitrobenzene	<97		97

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	0	D	40 - 139
2-Fluorobiphenyl	0	D	50 - 113
2-Fluorophenol	0	D	36 - 110
Terphenyl-d14	0	D	10 - 121
Phenol-d5	0	D	38 - 116
Nitrobenzene-d5	0	D	45 - 112

Analytical Data

Client: Ashland Inc.

Job Number: 680-51170-1

Client Sample ID: MW-23

Lab Sample ID: 680-51170-5

Client Matrix: Water

Date Sampled: 09/29/2009 0945

Date Received: 09/30/2009 0853

8270C Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)

Method:	8270C	Analysis Batch:	680-151289	Instrument ID:	MSG
Preparation:	3520C	Prep Batch:	680-150728	Lab File ID:	g5658a.d
Dilution:	10			Initial Weight/Volume:	1050 mL
Date Analyzed:	10/21/2009 1635	Run Type:	RE	Final Weight/Volume:	1 mL
Date Prepared:	10/16/2009 1358			Injection Volume:	

Analyte	Result (ug/L)	Qualifier	RL
Acenaphthene	<95	H	95
Acenaphthylene	<95	H	95
Acetophenone	<95	H	95
2-Acetylaminofluorene	<95	H	95
alpha,alpha-Dimethyl phenethylamine	<19000	H	19000
4-Aminobiphenyl	<95	H	95
Aniline	<190	H	190
Anthracene	<95	H	95
Aramite, Total	<95	H	95
Benzo[a]anthracene	<95	H	95
Benzo[a]pyrene	<95	H	95
Benzo[b]fluoranthene	<95	H	95
Benzo[g,h,i]perylene	<95	H	95
Benzo[k]fluoranthene	<95	H	95
Benzyl alcohol	<95	H	95
1,1'-Biphenyl	280	H	95
Bis(2-chloroethoxy)methane	<95	H	95
Bis(2-chloroethyl)ether	<95	H	95
bis(chloroisopropyl) ether	<95	H	95
Bis(2-ethylhexyl) phthalate	<95	H	95
4-Bromophenyl phenyl ether	<95	H	95
Butyl benzyl phthalate	<95	H	95
4-Chloroaniline	<190	H	190
4-Chloro-3-methylphenol	<95	H	95
2-Chloronaphthalene	<95	H	95
2-Chlorophenol	<95	H	95
4-Chlorophenyl phenyl ether	<95	H	95
Chrysene	<95	H	95
Diallate	<95	H	95
Dibenz(a,h)anthracene	<95	H	95
Dibenzofuran	<95	H	95
1,2-Dichlorobenzene	<95	H	95
1,3-Dichlorobenzene	<95	H	95
1,4-Dichlorobenzene	<95	H	95
3,3'-Dichlorobenzidine	<190	H	95
2,4-Dichlorophenol	<95	H	190
2,6-Dichlorophenol	<95	H	95
Diethyl phthalate	<95	H	95
Dimethoate	<95	H	95
7,12-Dimethylbenz(a)anthracene	<95	H	95
3,3'-Dimethylbenzidine	<190	H	95
2,4-Dimethylphenol	<95	H	190
Dimethyl phthalate	<95	H	95
Di-n-butyl phthalate	<95	H	95
1,3-Dinitrobenzene	<95	H	95
4,6-Dinitro-2-methylphenol	<480	H	480

Analytical Data

Client: Ashland Inc.

Job Number: 680-51170-1

Client Sample ID: MW-23

Lab Sample ID: 680-51170-5

Client Matrix: Water

Date Sampled: 09/29/2009 0945

Date Received: 09/30/2009 0853

8270C Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)

Method:	8270C	Analysis Batch:	680-151289	Instrument ID:	MSG
Preparation:	3520C	Prep Batch:	680-150728	Lab File ID:	g5658a.d
Dilution:	10			Initial Weight/Volume:	1050 mL
Date Analyzed:	10/21/2009 1635	Run Type:	RE	Final Weight/Volume:	1 mL
Date Prepared:	10/16/2009 1358			Injection Volume:	

Analyte	Result (ug/L)	Qualifier	RL
2,4-Dinitrophenol	<480	H	480
2,4-Dinitrotoluene	<95	H	95
2,6-Dinitrotoluene	<95	H	95
Di-n-octyl phthalate	<95	H	95
Dinoseb	<95	H	95
1,4-Dioxane	850	H	95
Disulfoton	<95	H	95
Ethyl methanesulfonate	<95	H	95
Ethyl Parathion	<95	H	95
Famphur	<95	H *	95
Fluoranthene	<95	H	95
Fluorene	<95	H	95
Hexachlorobenzene	<95	H	95
Hexachlorobutadiene	<95	H	95
Hexachlorocyclopentadiene	<95	H	95
Hexachloroethane	<95	H	95
Hexachlorophene	<48000	H	48000
Hexachloropropene	<95	H	95
Indeno[1,2,3-cd]pyrene	<95	H	95
Isophorone	<95	H	95
Isosafrole	<95	H	95
Methapyrilene	<19000	H	19000
3-Methylcholanthrene	<95	H	95
Methyl methanesulfonate	<95	H *	95
2-Methylnaphthalene	<95	H	95
Methyl parathion	<95	H	95
2-Methylphenol	<95	H	95
3 & 4 Methylphenol	470	H	95
Naphthalene	<95	H	95
1,4-Naphthoquinone	<95	H *	95
1-Naphthylamine	<95	H *	95
2-Naphthylamine	<95	H	95
2-Nitroaniline	<480	H	480
3-Nitroaniline	<480	H	480
4-Nitroaniline	<480	H	480
Nitrobenzene	<95	H	95
2-Nitrophenol	<95	H	95
4-Nitrophenol	<480	H	480
4-Nitroquinoline-1-oxide	<190	H	190
N-Nitro-o-toluidine	<95	H	95
N-Nitrosodimethylamine	<95	H	95
N-Nitrosodi-n-butylamine	<95	H	95
N-Nitrosodi-n-propylamine	<95	H	95
N-Nitrosodiphenylamine	<95	H	95
N-Nitrosomethylethlamine	<95	H	95

Analytical Data

Client: Ashland Inc.

Job Number: 680-51170-1

Client Sample ID: MW-23

Lab Sample ID: 680-51170-5

Client Matrix: Water

Date Sampled: 09/29/2009 0945

Date Received: 09/30/2009 0853

8270C Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)

Method:	8270C	Analysis Batch:	680-151289	Instrument ID:	MSG
Preparation:	3520C	Prep Batch:	680-150728	Lab File ID:	g5658a.d
Dilution:	10			Initial Weight/Volume:	1050 mL
Date Analyzed:	10/21/2009 1635	Run Type:	RE	Final Weight/Volume:	1 mL
Date Prepared:	10/16/2009 1358			Injection Volume:	

Analyte	Result (ug/L)	Qualifier	RL
N-Nitrosomorpholine	<95	H	95
N-Nitrosopiperidine	<95	H	95
N-Nitrosopyrrolidine	<95	H	95
o,o',o"-Triethylphosphorothioate	<95	H	95
p-Dimethylamino azobenzene	<95	H	95
Pentachlorobenzene	<95	H	95
Pentachloronitrobenzene	<95	H	95
Pentachlorophenol	<480	H	480
Phenacetin	<95	H	95
Phenanthrene	<95	H	95
Phenol	180	H	95
Phorate	<95	H	95
2-Picoline	<95	H	95
p-Phenylenediamine	<19000	H	19000
Pronamide	<95	H	95
Pyrene	<95	H	95
Pyridine	<480	H	480
Safrole, Total	<95	H	95
Sulfotep	<95	H	95
1,2,4,5-Tetrachlorobenzene	<95	H	95
2,3,4,6-Tetrachlorophenol	<95	H	95
Thionazin	<95	H	95
2-Toluidine	<95	H	95
1,2,4-Trichlorobenzene	<95	H	95
2,4,5-Trichlorophenol	<95	H	95
2,4,6-Trichlorophenol	<95	H	95
1,3,5-Trinitrobenzene	<95	H	95

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	0	D	40 - 139
2-Fluorobiphenyl	0	D	50 - 113
2-Fluorophenol	0	D	36 - 110
Terphenyl-d14	0	D	10 - 121
Phenol-d5	0	D	38 - 116
Nitrobenzene-d5	0	D	45 - 112

Analytical Data

Client: Ashland Inc.

Job Number: 680-51170-1

Client Sample ID: Dup

Lab Sample ID: 680-51170-6FD

Date Sampled: 09/29/2009 0000

Client Matrix: Water

Date Received: 09/30/2009 0853

8270C Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)

Method:	8270C	Analysis Batch:	680-150417	Instrument ID:	MSG
Preparation:	3520C	Prep Batch:	680-149426	Lab File ID:	g5608.d
Dilution:	10			Initial Weight/Volume:	1040 mL
Date Analyzed:	10/13/2009 1436			Final Weight/Volume:	1 mL
Date Prepared:	10/01/2009 1512			Injection Volume:	

Analyte	Result (ug/L)	Qualifier	RL
Acenaphthene	<96		96
Acenaphthylene	<96		96
Acetophenone	<96		96
2-Acetylaminofluorene	<96		96
alpha,alpha-Dimethyl phenethylamine	<19000		19000
4-Aminobiphenyl	<96		96
Aniline	<190		190
Anthracene	<96		96
Aramite, Total	<96		96
Benzo[a]anthracene	<96		96
Benzo[a]pyrene	<96		96
Benzo[b]fluoranthene	<96		96
Benzo[g,h,i]perylene	<96		96
Benzo[k]fluoranthene	<96		96
Benzyl alcohol	<96		96
1,1'-Biphenyl	330		96
Bis(2-chloroethoxy)methane	<96		96
Bis(2-chloroethyl)ether	<96		96
bis(chloroisopropyl) ether	<96		96
Bis(2-ethylhexyl) phthalate	<96		96
4-Bromophenyl phenyl ether	<96		96
Butyl benzyl phthalate	<96		96
4-Chloroaniline	<190		190
4-Chloro-3-methylphenol	<96		96
2-Chloronaphthalene	<96		96
2-Chlorophenol	<96		96
4-Chlorophenyl phenyl ether	<96		96
Chrysene	<96		96
Diallate	<96		96
Dibenz(a,h)anthracene	<96		96
Dibenzofuran	<96		96
1,2-Dichlorobenzene	<96		96
1,3-Dichlorobenzene	<96		96
1,4-Dichlorobenzene	<96		96
3,3'-Dichlorobenzidine	<190		190
2,4-Dichlorophenol	<96		96
2,6-Dichlorophenol	<96		96
Diethyl phthalate	<96		96
Dimethoate	<96		96
7,12-Dimethylbenz(a)anthracene	<96		96
3,3'-Dimethylbenzidine	<190		190
2,4-Dimethylphenol	<96		96
Dimethyl phthalate	<96		96
Di-n-butyl phthalate	<96		96
1,3-Dinitrobenzene	<96		96
4,6-Dinitro-2-methylphenol	<480		480

Analytical Data

Client: Ashland Inc.

Job Number: 680-51170-1

Client Sample ID: Dup

Lab Sample ID: 680-51170-6FD

Client Matrix: Water

Date Sampled: 09/29/2009 0000

Date Received: 09/30/2009 0853

8270C Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)

Method:	8270C	Analysis Batch:	680-150417	Instrument ID:	MSG
Preparation:	3520C	Prep Batch:	680-149426	Lab File ID:	g5608.d
Dilution:	10			Initial Weight/Volume:	1040 mL
Date Analyzed:	10/13/2009 1436			Final Weight/Volume:	1 mL
Date Prepared:	10/01/2009 1512			Injection Volume:	

Analyte	Result (ug/L)	Qualifier	RL
2,4-Dinitrophenol	<480		480
2,4-Dinitrotoluene	<96		96
2,6-Dinitrotoluene	<96		96
Di-n-octyl phthalate	<96		96
Dinoseb	<96		96
1,4-Dioxane	990		96
Disulfoton	<96		96
Ethyl methanesulfonate	<96		96
Ethyl Parathion	<96		96
Famphur	<96		96
Fluoranthene	<96		96
Fluorene	<96		96
Hexachlorobenzene	<96		96
Hexachlorobutadiene	<96		96
Hexachlorocyclopentadiene	<96		96
Hexachloroethane	<96		96
Hexachlorophene	<48000		48000
Hexachloropropene	<96		96
Indeno[1,2,3-cd]pyrene	<96		96
Isophorone	<96		96
Isosafrole	<96		96
Methapyrilene	<19000		19000
3-Methylcholanthrene	<96		96
Methyl methanesulfonate	<96		96
2-Methylnaphthalene	<96		96
Methyl parathion	<96		96
2-Methylphenol	<96		96
3 & 4 Methylphenol	610		96
Naphthalene	<96		96
1,4-Naphthoquinone	<96		96
1-Naphthylamine	<96		96
2-Naphthylamine	<96		96
2-Nitroaniline	<480		480
3-Nitroaniline	<480		480
4-Nitroaniline	<480		480
Nitrobenzene	<96		96
2-Nitrophenol	<96		96
4-Nitrophenol	<480		480
4-Nitroquinoline-1-oxide	<190		190
N-Nitro-o-toluidine	<96		96
N-Nitrosodiethylamine	<96		96
N-Nitrosodimethylamine	<96		96
N-Nitrosodi-n-butylamine	<96		96
N-Nitrosodi-n-propylamine	<96		96
N-Nitrosodiphenylamine	<96		96
N-Nitrosomethylalkylamine	<96		96

Analytical Data

Client: Ashland Inc.

Job Number: 680-51170-1

Client Sample ID: Dup

Lab Sample ID: 680-51170-6FD
Client Matrix: WaterDate Sampled: 09/29/2009 0000
Date Received: 09/30/2009 0853**8270C Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)**

Method:	8270C	Analysis Batch:	680-150417	Instrument ID:	MSG
Preparation:	3520C	Prep Batch:	680-149426	Lab File ID:	g5608.d
Dilution:	10			Initial Weight/Volume:	1040 mL
Date Analyzed:	10/13/2009 1436			Final Weight/Volume:	1 mL
Date Prepared:	10/01/2009 1512			Injection Volume:	

Analyte	Result (ug/L)	Qualifier	RL
N-Nitrosomorpholine	<96		96
N-Nitrosopiperidine	<96		96
N-Nitrosopyrrolidine	<96		96
o,o',o"-Triethylphosphorothioate	<96		96
p-Dimethylamino azobenzene	<96		96
Pentachlorobenzene	<96		96
Pentachloronitrobenzene	<96		96
Pentachlorophenol	<480		480
Phenacetin	<96		96
Phenanthrene	<96		96
Phenol	250		96
Phorate	<96		96
2-Picoline	<96		96
p-Phenylenediamine	<19000		19000
Pronamide	<96		96
Pyrene	<96		96
Pyridine	<480		480
Safrole, Total	<96		96
Sulfotep	<96		96
1,2,4,5-Tetrachlorobenzene	<96		96
2,3,4,6-Tetrachlorophenol	<96		96
Thionazin	<96		96
2-Toluidine	<96		96
1,2,4-Trichlorobenzene	<96		96
2,4,5-Trichlorophenol	<96		96
2,4,6-Trichlorophenol	<96		96
1,3,5-Trinitrobenzene	<96		96

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	0	D	40 - 139
2-Fluorobiphenyl	0	D	50 - 113
2-Fluorophenol	0	D	36 - 110
Terphenyl-d14	0	D	10 - 121
Phenol-d5	0	D	38 - 116
Nitrobenzene-d5	0	D	45 - 112

Analytical Data

Client: Ashland Inc.

Job Number: 680-51170-1

Client Sample ID: Dup

Lab Sample ID: 680-51170-6FD

Client Matrix: Water

Date Sampled: 09/29/2009 0000

Date Received: 09/30/2009 0853

8270C Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)

Method:	8270C	Analysis Batch:	680-151289	Instrument ID:	MSG
Preparation:	3520C	Prep Batch:	680-150728	Lab File ID:	g5659.d
Dilution:	10			Initial Weight/Volume:	1050 mL
Date Analyzed:	10/21/2009 1548	Run Type:	RE	Final Weight/Volume:	1 mL
Date Prepared:	10/16/2009 1358			Injection Volume:	

Analyte	Result (ug/L)	Qualifier	RL
Acenaphthene	<95	H	95
Acenaphthylene	<95	H	95
Acetophenone	<95	H	95
2-Acetylaminofluorene	<95	H	95
alpha,alpha-Dimethyl phenethylamine	<19000	H	19000
4-Aminobiphenyl	<95	H	95
Aniline	<190	H	190
Anthracene	<95	H	95
Aramite, Total	<95	H	95
Benzo[a]anthracene	<95	H	95
Benzo[a]pyrene	<95	H	95
Benzo[b]fluoranthene	<95	H	95
Benzo[g,h,i]perylene	<95	H	95
Benzo[k]fluoranthene	<95	H	95
Benzyl alcohol	<95	H	95
1,1'-Biphenyl	270	H	95
Bis(2-chloroethoxy)methane	<95	H	95
Bis(2-chloroethyl)ether	<95	H	95
bis(chloroisopropyl) ether	<95	H	95
Bis(2-ethylhexyl) phthalate	<95	H	95
4-Bromophenyl phenyl ether	<95	H	95
Butyl benzyl phthalate	<95	H	95
4-Chloroaniline	<190	H	190
4-Chloro-3-methylphenol	<95	H	95
2-Chloronaphthalene	<95	H	95
2-Chlorophenol	<95	H	95
4-Chlorophenyl phenyl ether	<95	H	95
Chrysene	<95	H	95
Diallate	<95	H	95
Dibenz(a,h)anthracene	<95	H	95
Dibenzofuran	<95	H	95
1,2-Dichlorobenzene	<95	H	95
1,3-Dichlorobenzene	<95	H	95
1,4-Dichlorobenzene	<95	H	95
3,3'-Dichlorobenzidine	<190	H	190
2,4-Dichlorophenol	<95	H	95
2,6-Dichlorophenol	<95	H	95
Diethyl phthalate	<95	H	95
Dimethoate	<95	H	95
7,12-Dimethylbenz(a)anthracene	<95	H	95
3,3'-Dimethylbenzidine	<190	H	190
2,4-Dimethylphenol	<95	H	95
Dimethyl phthalate	<95	H	95
Di-n-butyl phthalate	<95	H	95
1,3-Dinitrobenzene	<95	H	95
4,6-Dinitro-2-methylphenol	<480	H	480

Analytical Data

Client: Ashland Inc.

Job Number: 680-51170-1

Client Sample ID: Dup

Lab Sample ID: 680-51170-6FD

Date Sampled: 09/29/2009 0000

Client Matrix: Water

Date Received: 09/30/2009 0853

8270C Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)

Method:	8270C	Analysis Batch:	680-151289	Instrument ID:	MSG
Preparation:	3520C	Prep Batch:	680-150728	Lab File ID:	g5659.d
Dilution:	10			Initial Weight/Volume:	1050 mL
Date Analyzed:	10/21/2009 1548	Run Type:	RE	Final Weight/Volume:	1 mL
Date Prepared:	10/16/2009 1358			Injection Volume:	

Analyte	Result (ug/L)	Qualifier	RL
2,4-Dinitrophenol	<480	H	480
2,4-Dinitrotoluene	<95	H	95
2,6-Dinitrotoluene	<95	H	95
Di-n-octyl phthalate	<95	H	95
Dinoseb	<95	H	95
1,4-Dioxane	1100	H	95
Disulfoton	<95	H	95
Ethyl methanesulfonate	<95	H	95
Ethyl Parathion	<95	H	95
Famphur	<95	H *	95
Fluoranthene	<95	H	95
Fluorene	<95	H	95
Hexachlorobenzene	<95	H	95
Hexachlorobutadiene	<95	H	95
Hexachlorocyclopentadiene	<95	H	95
Hexachloroethane	<95	H	95
Hexachlorophene	<48000	H	48000
Hexachloropropene	<95	H	95
Indeno[1,2,3-cd]pyrene	<95	H	95
Isophorone	<95	H	95
Isosafrole	<95	H	95
Methapyriene	<19000	H	19000
3-Methylcholanthrene	<95	H	95
Methyl methanesulfonate	<95	H *	95
2-Methylnaphthalene	<95	H	95
Methyl parathion	<95	H	95
2-Methylphenol	<95	H	95
3 & 4 Methylphenol	560	H	95
Naphthalene	<95	H	95
1,4-Naphthoquinone	<95	H *	95
1-Naphthylamine	<95	H *	95
2-Naphthylamine	<95	H	95
2-Nitroaniline	<480	H	480
3-Nitroaniline	<480	H	480
4-Nitroaniline	<480	H	480
Nitrobenzene	<95	H	95
2-Nitrophenol	<95	H	95
4-Nitrophenol	<480	H	480
4-Nitroquinoline-1-oxide	<190	H	190
N-Nitro-o-toluidine	<95	H	95
N-Nitrosodiethylamine	<95	H	95
N-Nitrosodimethylamine	<95	H	95
N-Nitrosodi-n-butylamine	<95	H	95
N-Nitrosodi-n-propylamine	<95	H	95
N-Nitrosodiphenylamine	<95	H	95
N-Nitrosomethylmethamphetamine	<95	H	95

Analytical Data

Client: Ashland Inc.

Job Number: 680-51170-1

Client Sample ID: Dup

Lab Sample ID: 680-51170-6FD

Client Matrix: Water

Date Sampled: 09/29/2009 0000

Date Received: 09/30/2009 0853

8270C Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)

Method:	8270C	Analysis Batch:	680-151289	Instrument ID:	MSG
Preparation:	3520C	Prep Batch:	680-150728	Lab File ID:	g5659.d
Dilution:	10			Initial Weight/Volume:	1050 mL
Date Analyzed:	10/21/2009 1548	Run Type:	RE	Final Weight/Volume:	1 mL
Date Prepared:	10/16/2009 1358			Injection Volume:	

Analyte	Result (ug/L)	Qualifier	RL
N-Nitrosomorpholine	<95	H	95
N-Nitrosopiperidine	<95	H	95
N-Nitrosopyrrolidine	<95	H	95
o,o',o"-Triethylphosphorothioate	<95	H	95
p-Dimethylamino azobenzene	<95	H	95
Pentachlorobenzene	<95	H	95
Pentachloronitrobenzene	<95	H	95
Pentachlorophenol	<480	H	480
Phenacetin	<95	H	95
Phenanthrene	<95	H	95
Phenol	200	H	95
Phorate	<95	H	95
2-Picoline	<95	H	95
p-Phenylenediamine	<19000	H	19000
Pronamide	<95	H	95
Pyrene	<95	H	95
Pyridine	<480	H	480
Safrole, Total	<95	H	95
Sulfotep	<95	H	95
1,2,4,5-Tetrachlorobenzene	<95	H	95
2,3,4,6-Tetrachlorophenol	<95	H	95
Thionazin	<95	H	95
2-Toluidine	<95	H	95
1,2,4-Trichlorobenzene	<95	H	95
2,4,5-Trichlorophenol	<95	H	95
2,4,6-Trichlorophenol	<95	H	95
1,3,5-Trinitrobenzene	<95	H	95

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	0	D	40 - 139
2-Fluorobiphenyl	0	D	50 - 113
2-Fluorophenol	0	D	36 - 110
Terphenyl-d14	0	D	10 - 121
Phenol-d5	0	D	38 - 116
Nitrobenzene-d5	0	D	45 - 112

Analytical Data

Client: Ashland Inc.

Job Number: 680-51170-1

Client Sample ID: MW-21

Lab Sample ID: 680-51170-7

Client Matrix: Water

Date Sampled: 09/29/2009 1142

Date Received: 09/30/2009 0853

8270C Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)

Method:	8270C	Analysis Batch:	680-150416	Instrument ID:	MSG
Preparation:	3520C	Prep Batch:	680-149426	Lab File ID:	g5586.d
Dilution:	10			Initial Weight/Volume:	1040 mL
Date Analyzed:	10/12/2009 1334			Final Weight/Volume:	1 mL
Date Prepared:	10/01/2009 1512			Injection Volume:	

Analyte	Result (ug/L)	Qualifier	RL
Acenaphthene	<96		96
Acenaphthylene	<96		96
Acetophenone	<96		96
2-Acetylaminofluorene	<96		96
alpha,alpha-Dimethyl phenethylamine	<19000	*	19000
4-Aminobiphenyl	<96		96
Aniline	<190		190
Anthracene	<96		96
Aramite, Total	<96		96
Benzo[a]anthracene	<96		96
Benzo[a]pyrene	<96		96
Benzo[b]fluoranthene	<96		96
Benzo[g,h,i]perylene	<96		96
Benzo[k]fluoranthene	<96		96
Benzyl alcohol	<96		96
1,1'-Biphenyl	730		96
Bis(2-chloroethoxy)methane	<96	*	96
Bis(2-chloroethyl)ether	<96		96
bis(chloroisopropyl) ether	<96		96
Bis(2-ethylhexyl) phthalate	<96		96
4-Bromophenyl phenyl ether	<96		96
Butyl benzyl phthalate	<96		96
4-Chloroaniline	<190		190
4-Chloro-3-methylphenol	<96		96
2-Chloronaphthalene	<96		96
2-Chlorophenol	<96		96
4-Chlorophenyl phenyl ether	<96		96
Chrysene	<96		96
Diallate	<96		96
Dibenz(a,h)anthracene	<96		96
Dibenzofuran	<96		96
1,2-Dichlorobenzene	<96		96
1,3-Dichlorobenzene	<96		96
1,4-Dichlorobenzene	<96		96
3,3'-Dichlorobenzidine	<190		190
2,4-Dichlorophenol	<96		96
2,6-Dichlorophenol	<96		96
Diethyl phthalate	<96		96
Dimethoate	<96		96
7,12-Dimethylbenz(a)anthracene	<96		96
3,3'-Dimethylbenzidine	<190	*	190
2,4-Dimethylphenol	<96		96
Dimethyl phthalate	<96		96
Di-n-butyl phthalate	<96		96
1,3-Dinitrobenzene	<96		96
4,6-Dinitro-2-methylphenol	<480		480

Analytical Data

Client: Ashland Inc.

Job Number: 680-51170-1

Client Sample ID: MW-21

Lab Sample ID: 680-51170-7

Client Matrix: Water

Date Sampled: 09/29/2009 1142

Date Received: 09/30/2009 0853

8270C Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)

Method:	8270C	Analysis Batch:	680-150416	Instrument ID:	MSG
Preparation:	3520C	Prep Batch:	680-149426	Lab File ID:	g5586.d
Dilution:	10			Initial Weight/Volume:	1040 mL
Date Analyzed:	10/12/2009 1334			Final Weight/Volume:	1 mL
Date Prepared:	10/01/2009 1512			Injection Volume:	

Analyte	Result (ug/L)	Qualifier	RL
2,4-Dinitrophenol	<480		480
2,4-Dinitrotoluene	<96		96
2,6-Dinitrotoluene	<96		96
Di-n-octyl phthalate	<96		96
Dinoseb	<96		96
1,4-Dioxane	360		96
Disulfoton	<96		96
Ethyl methanesulfonate	<96		96
Ethyl Parathion	<96		96
Famphur	<96		96
Fluoranthene	<96		96
Fluorene	<96		96
Hexachlorobenzene	<96		96
Hexachlorobutadiene	<96		96
Hexachlorocyclopentadiene	<96		96
Hexachloroethane	<96		96
Hexachlorophene	<48000		48000
Hexachloropropene	<96		96
Indeno[1,2,3-cd]pyrene	<96		96
Isophorone	<96		96
Iosafrole	<96		96
Methapyriene	<19000	*	19000
3-Methylcholanthrene	<96		96
Methyl methanesulfonate	<96	*	96
2-Methylnaphthalene	<96		96
Methyl parathion	<96		96
2-Methylphenol	<96		96
3 & 4 Methylphenol	160		96
Naphthalene	<96		96
1,4-Naphthoquinone	<96		96
1-Naphthylamine	<96	*	96
2-Naphthylamine	<96		96
2-Nitroaniline	<480		480
3-Nitroaniline	<480		480
4-Nitroaniline	<480		480
Nitrobenzene	<96		96
2-Nitrophenol	<96		96
4-Nitrophenol	<480		480
4-Nitroquinoline-1-oxide	<190		190
N-Nitro-o-toluidine	<96		96
N-Nitrosodimethylamine	<96		96
N-Nitrosodi-n-butylamine	<96		96
N-Nitrosodi-n-propylamine	<96		96
N-Nitrosodiphenylamine	<96		96
N-Nitrosomethylethyamine	<96		96

Analytical Data

Client: Ashland Inc.

Job Number: 680-51170-1

Client Sample ID: MW-21

Lab Sample ID: 680-51170-7

Client Matrix: Water

Date Sampled: 09/29/2009 1142

Date Received: 09/30/2009 0853

8270C Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)

Method:	8270C	Analysis Batch:	680-150416	Instrument ID:	MSG
Preparation:	3520C	Prep Batch:	680-149426	Lab File ID:	g5586.d
Dilution:	10			Initial Weight/Volume:	1040 mL
Date Analyzed:	10/12/2009 1334			Final Weight/Volume:	1 mL
Date Prepared:	10/01/2009 1512			Injection Volume:	

Analyte	Result (ug/L)	Qualifier	RL
N-Nitrosomorpholine	<96		96
N-Nitrosopiperidine	<96		96
N-Nitrosopyrrolidine	<96		96
o,o',o"-Triethylphosphorothioate	<96		96
p-Dimethylamino azobenzene	<96		96
Pentachlorobenzene	<96		96
Pentachloronitrobenzene	<96		96
Pentachlorophenol	<480		480
Phenacetin	<96		96
Phenanthrene	<96		96
Phenol	<96		96
Phorate	<96		96
2-Picoline	<96	*	96
p-Phenylenediamine	<19000	*	19000
Pronamide	<96		96
Pyrene	<96		96
Pyridine	<480	*	480
Safrole, Total	<96		96
Sulfotep	<96		96
1,2,4,5-Tetrachlorobenzene	<96		96
2,3,4,6-Tetrachlorophenol	<96		96
Thionazin	<96		96
2-Toluidine	<96		96
1,2,4-Trichlorobenzene	<96		96
2,4,5-Trichlorophenol	<96		96
2,4,6-Trichlorophenol	<96		96
1,3,5-Trinitrobenzene	<96		96

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	0	D	40 - 139
2-Fluorobiphenyl	0	D	50 - 113
2-Fluorophenol	0	D	36 - 110
Terphenyl-d14	0	D	10 - 121
Phenol-d5	0	D	38 - 116
Nitrobenzene-d5	0	D	45 - 112

Client: Ashland Inc.

Analytical Data

Job Number: 680-51170-1

Client Sample ID: MW-21

Lab Sample ID: 680-51170-7

Client Matrix: Water

Date Sampled: 09/29/2009 1142

Date Received: 09/30/2009 0853

8270C Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)

Method:	8270C	Analysis Batch:	680-151383	Instrument ID:	MST
Preparation:	3520C	Prep Batch:	680-150728	Lab File ID:	t3818.d
Dilution:	10			Initial Weight/Volume:	1050 mL
Date Analyzed:	10/23/2009 1136	Run Type:	RE	Final Weight/Volume:	1 mL
Date Prepared:	10/16/2009 1358			Injection Volume:	

Analyte	Result (ug/L)	Qualifier	RL
Acenaphthene	<95	H	95
Acenaphthylene	<95	H	95
Acetophenone	<95	H	95
2-Acetylaminofluorene	<95	H	95
alpha,alpha-Dimethyl phenethylamine	<19000	H	19000
4-Aminobiphenyl	<95	H	95
Aniline	<190	H	190
Anthracene	<95	H	95
Aramite, Total	<95	H	95
Benz[a]anthracene	<95	H	95
Benz[a]pyrene	<95	H	95
Benz[b]fluoranthene	<95	H	95
Benzog,h,i]perylene	<95	H	95
Benzo[k]fluoranthene	<95	H	95
Benzyl alcohol	<95	H	95
1,1'-Biphenyl	580	H	95
Bis(2-chloroethoxy)methane	<95	H	95
Bis(2-chloroethyl)ether	<95	H	95
bis(chloroisopropyl) ether	<95	H	95
Bis(2-ethylhexyl) phthalate	<95	H	95
4-Bromophenyl phenyl ether	<95	H	95
Butyl benzyl phthalate	<95	H	95
4-Chloroaniline	<190	H	190
4-Chloro-3-methylphenol	<95	H	95
2-Chloronaphthalene	<95	H	95
2-Chlorophenol	<95	H	95
4-Chlorophenyl phenyl ether	<95	H	95
Chrysene	<95	H	95
Diallate	<95	H	95
Dibenz(a,h)anthracene	<95	H	95
Dibenzofuran	<95	H	95
1,2-Dichlorobenzene	<95	H	95
1,3-Dichlorobenzene	<95	H	95
1,4-Dichlorobenzene	<95	H	95
3,3'-Dichlorobenzidine	<190	H	190
2,4-Dichlorophenol	<95	H	95
2,6-Dichlorophenol	<95	H	95
Diethyl phthalate	<95	H	95
Dimethoate	<95	H	95
7,12-Dimethylbenz(a)anthracene	<95	H	95
3,3'-Dimethylbenzidine	<190	H	95
2,4-Dimethylphenol	<95	H	95
Dimethyl phthalate	<95	H	95
Di-n-butyl phthalate	<95	H	95
1,3-Dinitrobenzene	<95	H	95
4,6-Dinitro-2-methylphenol	<480	H	480

Analytical Data

Client: Ashland Inc.

Job Number: 680-51170-1

Client Sample ID: MW-21

Lab Sample ID: 680-51170-7

Date Sampled: 09/29/2009 1142

Client Matrix: Water

Date Received: 09/30/2009 0853

8270C Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)

Method:	8270C	Analysis Batch:	680-151383	Instrument ID:	MST
Preparation:	3520C	Prep Batch:	680-150728	Lab File ID:	t3818.d
Dilution:	10			Initial Weight/Volume:	1050 mL
Date Analyzed:	10/23/2009 1136	Run Type:	RE	Final Weight/Volume:	1 mL
Date Prepared:	10/16/2009 1358			Injection Volume:	

Analyte	Result (ug/L)	Qualifier	RL
2,4-Dinitrophenol	<480	H	480
2,4-Dinitrotoluene	<95	H	95
2,6-Dinitrotoluene	<95	H	95
Di-n-octyl phthalate	<95	H	95
Dinoseb	<95	H	95
1,4-Dioxane	670	H	95
Disulfoton	<95	H	95
Ethyl methanesulfonate	<95	H	95
Ethyl Parathion	<95	H	95
Famphur	<95	H	95
Fluoranthene	<95	H	95
Fluorene	<95	H	95
Hexachlorobenzene	<95	H	95
Hexachlorobutadiene	<95	H	95
Hexachlorocyclopentadiene	<95	H	95
Hexachloroethane	<95	H	95
Hexachlorophene	<48000	H	48000
Hexachloropropene	<95	H	95
Indeno[1,2,3-cd]pyrene	<95	H	95
Isophorone	<95	H	95
Isosafrole	<95	H	95
Methapyrilene	<19000	H	19000
3-Methylcholanthrene	<95	H	95
Methyl methanesulfonate	<95	H	95
2-Methylnaphthalene	<95	H	95
Methyl parathion	<95	H	95
2-Methylphenol	<95	H	95
3 & 4 Methylphenol	120	H	95
Naphthalene	<95	H	95
1,4-Naphthoquinone	<95	H	95
1-Naphthylamine	<95	H	95
2-Naphthylamine	<95	H	95
2-Nitroaniline	<480	H	480
3-Nitroaniline	<480	H	480
4-Nitroaniline	<480	H	480
Nitrobenzene	<95	H	95
2-Nitrophenol	<95	H	95
4-Nitrophenol	<480	H	480
4-Nitroquinoline-1-oxide	<190	H	190
N-Nitro-o-toluidine	<95	H	95
N-Nitrosodiethylamine	<95	H	95
N-Nitrosodimethylamine	<95	H	95
N-Nitrosodi-n-butylamine	<95	H	95
N-Nitrosodi-n-propylamine	<95	H	95
N-Nitrosodiphenylamine	<95	H	95
N-Nitrosomethylalkylamine	<95	H	95

Analytical Data

Client: Ashland Inc.

Job Number: 680-51170-1

Client Sample ID: MW-21

Lab Sample ID: 680-51170-7

Date Sampled: 09/29/2009 1142

Client Matrix: Water

Date Received: 09/30/2009 0853

8270C Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)

Method:	8270C	Analysis Batch:	680-151383	Instrument ID:	MST
Preparation:	3520C	Prep Batch:	680-150728	Lab File ID:	t3818.d
Dilution:	10			Initial Weight/Volume:	1050 mL
Date Analyzed:	10/23/2009 1136	Run Type:	RE	Final Weight/Volume:	1 mL
Date Prepared:	10/16/2009 1358			Injection Volume:	

Analyte	Result (ug/L)	Qualifier	RL
N-Nitrosomorpholine	<95	H	95
N-Nitrosopiperidine	<95	H	95
N-Nitrosopyrrolidine	<95	H	95
o,o',o"-Triethylphosphorothioate	<95	H	95
p-Dimethylamino azobenzene	<95	H	95
Pentachlorobenzene	<95	H	95
Pentachloronitrobenzene	<95	H	95
Pentachlorophenol	<480	H	480
Phenacetin	<95	H	95
Phenanthrene	<95	H	95
Phenol	140	H	95
Phorate	<95	H	95
2-Picoline	<95	H	95
p-Phenylenediamine	<19000	H	19000
Pronamide	<95	H	95
Pyrene	<95	H	95
Pyridine	<480	H	480
Safrole, Total	<95	H	95
Sulfotep	<95	H	95
1,2,4,5-Tetrachlorobenzene	<95	H	95
2,3,4,6-Tetrachlorophenol	<95	H	95
Thionazin	<95	H	95
2-Toluidine	<95	H	95
1,2,4-Trichlorobenzene	<95	H	95
2,4,5-Trichlorophenol	<95	H	95
2,4,6-Trichlorophenol	<95	H	95
1,3,5-Trinitrobenzene	<95	H	95
Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	0	D	40 - 139
2-Fluorobiphenyl	0	D	50 - 113
2-Fluorophenol	0	D	36 - 110
Terphenyl-d14	0	D	10 - 121
Phenol-d5	0	D	38 - 116
Nitrobenzene-d5	0	D	45 - 112

Analytical Data

Client: Ashland Inc.

Job Number: 680-51170-1

Client Sample ID: MW-24

Lab Sample ID: 680-51170-1

Date Sampled: 09/28/2009 1605

Client Matrix: Water

Date Received: 09/30/2009 0853

8081A_8082 Organochlorine Pesticides & PCBs (GC)

Method:	8081A_8082	Analysis Batch: 680-149832	Instrument ID:	SGM
Preparation:	3520C	Prep Batch: 680-149433	Initial Weight/Volume:	1060 mL
Dilution:	1.0		Final Weight/Volume:	10 mL
Date Analyzed:	10/05/2009 1844		Injection Volume:	1.0 uL
Date Prepared:	10/01/2009 1512		Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	RL
PCB-1016	<0.94		0.94
PCB-1221	<1.9		1.9
PCB-1232	<0.94		0.94
PCB-1242	<0.94		0.94
PCB-1248	<0.94		0.94
PCB-1254	<0.94		0.94
PCB-1260	<0.94		0.94
Chlorobenzilate	<0.47		0.47
Isodrin	<0.047		0.047
Kepone	<0.94		0.94
4,4'-DDD	<0.094		0.094
4,4'-DDE	<0.094		0.094
4,4'-DDT	<0.094		0.094
Aldrin	<0.047		0.047
alpha-BHC	<0.047		0.047
beta-BHC	<0.047		0.047
Chlordane (technical)	<0.47		0.47
delta-BHC	<0.047		0.047
Dieldrin	<0.094		0.094
Endosulfan I	<0.047		0.047
Endosulfan II	<0.094		0.094
Endosulfan sulfate	<0.094		0.094
Endrin	<0.094		0.094
Endrin aldehyde	<0.094		0.094
Endrin ketone	<0.094		0.094
gamma-BHC (Lindane)	<0.047		0.047
Heptachlor	<0.047		0.047
Heptachlor epoxide	<0.047		0.047
Methoxychlor	<0.47		0.47
Toxaphene	<4.7		4.7
Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	18		14 - 115
Tetrachloro-m-xylene	54		35 - 120

Analytical Data

Client: Ashland Inc.

Job Number: 680-51170-1

Client Sample ID: RB

Lab Sample ID: 680-51170-2RB

Client Matrix: Water

Date Sampled: 09/28/2009 1745

Date Received: 09/30/2009 0853

8081A_8082 Organochlorine Pesticides & PCBs (GC)

Method:	8081A_8082	Analysis Batch: 680-149832	Instrument ID:	SGM
Preparation:	3520C	Prep Batch: 680-149433	Initial Weight/Volume:	1060 mL
Dilution:	1.0		Final Weight/Volume:	10 mL
Date Analyzed:	10/05/2009 1903		Injection Volume:	1.0 uL
Date Prepared:	10/01/2009 1512		Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	RL
PCB-1016	<0.94		0.94
PCB-1221	<1.9		1.9
PCB-1232	<0.94		0.94
PCB-1242	<0.94		0.94
PCB-1248	<0.94		0.94
PCB-1254	<0.94		0.94
PCB-1260	<0.94		0.94
Chlorobenzilate	<0.47		0.47
Isodrin	<0.047		0.047
Kepone	<0.94		0.94
4,4'-DDD	<0.094		0.094
4,4'-DDE	<0.094		0.094
4,4'-DDT	<0.094		0.094
Aldrin	<0.047		0.047
alpha-BHC	<0.047		0.047
beta-BHC	<0.047		0.047
Chlordane (technical)	<0.47		0.47
delta-BHC	<0.047		0.047
Dieldrin	<0.094		0.094
Endosulfan I	<0.047		0.047
Endosulfan II	<0.094		0.094
Endosulfan sulfate	<0.094		0.094
Endrin	<0.094		0.094
Endrin aldehyde	<0.094		0.094
Endrin ketone	<0.094		0.094
gamma-BHC (Lindane)	<0.047		0.047
Heptachlor	<0.047		0.047
Heptachlor epoxide	<0.047		0.047
Methoxychlor	<0.47		0.47
Toxaphene	<4.7		4.7

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	58		14 - 115
Tetrachloro-m-xylene	56		35 - 120

Analytical Data

Client: Ashland Inc.

Job Number: 680-51170-1

Client Sample ID: MW-20

Lab Sample ID: 680-51170-3

Client Matrix: Water

Date Sampled: 09/29/2009 0720

Date Received: 09/30/2009 0853

8081A_8082 Organochlorine Pesticides & PCBs (GC)

Method:	8081A_8082	Analysis Batch:	680-149832	Instrument ID:	SGM
Preparation:	3520C	Prep Batch:	680-149433	Initial Weight/Volume:	1060 mL
Dilution:	1.0			Final Weight/Volume:	10 mL
Date Analyzed:	10/05/2009 1923			Injection Volume:	1.0 uL
Date Prepared:	10/01/2009 1512			Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	RL
PCB-1016	<0.94		0.94
PCB-1221	<1.9		1.9
PCB-1232	<0.94		0.94
PCB-1242	<0.94		0.94
PCB-1248	<0.94		0.94
PCB-1254	<0.94		0.94
PCB-1260	<0.94		0.94
Chlorobenzilate	<0.47		0.47
Isodrin	<0.047		0.047
Kepone	<0.94		0.94
4,4'-DDD	<0.094		0.094
4,4'-DDE	<0.094		0.094
4,4'-DDT	<0.094		0.094
Aldrin	<0.047		0.047
alpha-BHC	<0.047		0.047
beta-BHC	<0.047		0.047
Chlordane (technical)	<0.47		0.47
delta-BHC	<0.047		0.047
Dieldrin	<0.094		0.094
Endosulfan I	<0.047		0.047
Endosulfan II	<0.094		0.094
Endosulfan sulfate	<0.094		0.094
Endrin	<0.094		0.094
Endrin aldehyde	<0.094		0.094
Endrin ketone	<0.094		0.094
gamma-BHC (Lindane)	<0.047		0.047
Heptachlor	<0.047		0.047
Heptachlor epoxide	<0.047		0.047
Methoxychlor	<0.47		0.47
Toxaphene	<4.7		4.7

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	11	p X	14 - 115
Tetrachloro-m-xylene	67		35 - 120

Analytical Data

Client: Ashland Inc.

Job Number: 680-51170-1

Client Sample ID: MW-22

Lab Sample ID: 680-51170-4

Client Matrix: Water

Date Sampled: 09/29/2009 0823

Date Received: 09/30/2009 0853

8081A_8082 Organochlorine Pesticides & PCBs (GC)

Method:	8081A_8082	Analysis Batch: 680-149832	Instrument ID:	SGM
Preparation:	3520C	Prep Batch: 680-149433	Initial Weight/Volume:	1030 mL
Dilution:	1.0		Final Weight/Volume:	10 mL
Date Analyzed:	10/05/2009 1942		Injection Volume:	1.0 uL
Date Prepared:	10/01/2009 1512		Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	RL
PCB-1016	<0.97		0.97
PCB-1221	<1.9		1.9
PCB-1232	<0.97		0.97
PCB-1242	<0.97		0.97
PCB-1248	<0.97		0.97
PCB-1254	<0.97		0.97
PCB-1260	<0.97		0.97
Chlorobenzilate	<0.49		0.49
Isodrin	<0.049		0.049
Kepone	<0.97		0.97
4,4'-DDD	<0.097		0.097
4,4'-DDE	<0.097		0.097
4,4'-DDT	<0.097		0.097
Aldrin	<0.049		0.049
alpha-BHC	<0.049		0.049
beta-BHC	<0.049		0.049
Chlordane (technical)	<0.49		0.49
delta-BHC	<0.049		0.049
Dieldrin	<0.097		0.097
Endosulfan I	<0.049		0.049
Endosulfan II	<0.097		0.097
Endosulfan sulfate	<0.097		0.097
Endrin	<0.097		0.097
Endrin aldehyde	<0.097		0.097
Endrin ketone	<0.097		0.097
gamma-BHC (Lindane)	<0.049		0.049
Heptachlor	<0.049		0.049
Heptachlor epoxide	<0.049		0.049
Methoxychlor	<0.49		0.49
Toxaphene	<4.9		4.9

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	11	X	14 - 115
Tetrachloro-m-xylene	48		35 - 120

Analytical Data

Client: Ashland Inc.

Job Number: 680-51170-1

Client Sample ID: MW-23

Lab Sample ID: 680-51170-5

Client Matrix: Water

Date Sampled: 09/29/2009 0945

Date Received: 09/30/2009 0853

8081A_8082 Organochlorine Pesticides & PCBs (GC)

Method:	8081A_8082	Analysis Batch: 680-149832	Instrument ID:	SGM
Preparation:	3520C	Prep Batch: 680-149433	Initial Weight/Volume:	1040 mL
Dilution:	1.0		Final Weight/Volume:	10 mL
Date Analyzed:	10/05/2009 2002		Injection Volume:	1.0 uL
Date Prepared:	10/01/2009 1512		Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	RL
PCB-1016	<0.96		0.96
PCB-1221	<1.9		1.9
PCB-1232	<0.96		0.96
PCB-1242	<0.96		0.96
PCB-1248	<0.96		0.96
PCB-1254	<0.96		0.96
PCB-1260	<0.96		0.96
Chlorobenzilate	<0.48		0.48
Isodrin	<0.048		0.048
Kepone	<0.96		0.96
4,4'-DDD	<0.096		0.096
4,4'-DDE	<0.096		0.096
4,4'-DDT	<0.096		0.096
Aldrin	<0.048		0.048
alpha-BHC	<0.048		0.048
beta-BHC	<0.048		0.048
Chlordane (technical)	<0.48		0.48
delta-BHC	<0.048		0.048
Dieldrin	<0.096		0.096
Endosulfan I	<0.048		0.048
Endosulfan II	<0.096		0.096
Endosulfan sulfate	<0.096		0.096
Endrin	<0.096		0.096
Endrin aldehyde	<0.096		0.096
Endrin ketone	<0.096		0.096
gamma-BHC (Lindane)	<0.048		0.048
Heptachlor	<0.048		0.048
Heptachlor epoxide	<0.048		0.048
Methoxychlor	<0.48		0.48
Toxaphene	<4.8		4.8
Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	16		14 - 115
Tetrachloro-m-xylene	61		35 - 120

Analytical Data

Client: Ashland Inc.

Job Number: 680-51170-1

Client Sample ID: Dup

Lab Sample ID: 680-51170-6FD

Client Matrix: Water

Date Sampled: 09/29/2009 0000

Date Received: 09/30/2009 0853

8081A_8082 Organochlorine Pesticides & PCBs (GC)

Method:	8081A_8082	Analysis Batch: 680-149832	Instrument ID:	SGM
Preparation:	3520C	Prep Batch: 680-149433	Initial Weight/Volume:	1050 mL
Dilution:	1.0		Final Weight/Volume:	10 mL
Date Analyzed:	10/05/2009 2021		Injection Volume:	1.0 uL
Date Prepared:	10/01/2009 1512		Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	RL
PCB-1016	<0.95		0.95
PCB-1221	<1.9		1.9
PCB-1232	<0.95		0.95
PCB-1242	<0.95		0.95
PCB-1248	<0.95		0.95
PCB-1254	<0.95		0.95
PCB-1260	<0.95		0.95
Chlorobenzilate	<0.48		0.48
Isodrin	<0.048		0.048
Kepone	<0.95		0.95
4,4'-DDD	<0.095		0.095
4,4'-DDE	<0.095		0.095
4,4'-DDT	<0.095		0.095
Aldrin	<0.048		0.048
alpha-BHC	<0.048		0.048
beta-BHC	<0.048		0.048
Chlordane (technical)	<0.48		0.48
delta-BHC	<0.048		0.048
Dieldrin	<0.095		0.095
Endosulfan I	<0.048		0.048
Endosulfan II	<0.095		0.095
Endosulfan sulfate	<0.095		0.095
Endrin	<0.095		0.095
Endrin aldehyde	<0.095		0.095
Endrin ketone	<0.095		0.095
gamma-BHC (Lindane)	<0.048		0.048
Heptachlor	<0.048		0.048
Heptachlor epoxide	<0.048		0.048
Methoxychlor	<0.48		0.48
Toxaphene	<4.8		4.8

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	16		14 - 115
Tetrachloro-m-xylene	68		35 - 120

Analytical Data

Client: Ashland Inc.

Job Number: 680-51170-1

Client Sample ID: MW-21

Lab Sample ID: 680-51170-7

Client Matrix: Water

Date Sampled: 09/29/2009 1142

Date Received: 09/30/2009 0853

8081A_8082 Organochlorine Pesticides & PCBs (GC)

Method:	8081A_8082	Analysis Batch: 680-149832	Instrument ID: SGM
Preparation:	3520C	Prep Batch: 680-149433	Initial Weight/Volume: 1030 mL
Dilution:	1.0	Final Weight/Volume: 10 mL	Injection Volume: 1.0 uL
Date Analyzed:	10/05/2009 2040		Result Type: PRIMARY
Date Prepared:	10/01/2009 1512		

Analyte	Result (ug/L)	Qualifier	RL
PCB-1016	<0.97		0.97
PCB-1221	<1.9		1.9
PCB-1232	<0.97		0.97
PCB-1242	<0.97		0.97
PCB-1248	<0.97		0.97
PCB-1254	<0.97		0.97
PCB-1260	<0.97		0.97
Chlorobenzilate	<0.49		0.49
Isodrin	<0.049		0.049
Kepone	<0.97		0.97
4,4'-DDD	<0.097		0.097
4,4'-DDE	<0.097		0.097
4,4'-DDT	<0.097		0.049
Aldrin	<0.049		0.049
alpha-BHC	<0.049		0.049
beta-BHC	<0.049		0.49
Chlordane (technical)	<0.49		0.049
delta-BHC	<0.049		0.097
Dieldrin	<0.097		0.049
Endosulfan I	<0.049		0.097
Endosulfan II	<0.097		0.097
Endosulfan sulfate	<0.097		0.097
Endrin	<0.097		0.097
Endrin aldehyde	<0.097		0.097
Endrin ketone	<0.097		0.049
gamma-BHC (Lindane)	<0.049		0.049
Heptachlor	<0.049		0.049
Heptachlor epoxide	<0.049		0.49
Methoxychlor	<0.49		4.9
Toxaphene	<4.9		
Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl	24		14 - 115
Tetrachloro-m-xylene	75		35 - 120

Analytical Data

Client: Ashland Inc.

Job Number: 680-51170-1

Client Sample ID: MW-24

Lab Sample ID: 680-51170-1

Client Matrix: Water

Date Sampled: 09/28/2009 1605

Date Received: 09/30/2009 0853

6010B Metals (ICP)

Method:	6010B	Analysis Batch: 680-149607	Instrument ID:	ICPD
Preparation:	3010A	Prep Batch: 680-149455	Lab File ID:	N/A
Dilution:	1.0		Initial Weight/Volume:	50 mL
Date Analyzed:	10/02/2009 1934		Final Weight/Volume:	50 mL
Date Prepared:	10/01/2009 1232			

Analyte	Result (ug/L)	Qualifier	RL
Arsenic	<20		20
Barium	280		10
Cadmium	<5.0		5.0
Chromium	<10		10
Lead	<10		10
Selenium	<20		20
Silver	<10		10

7470A Mercury (CVAA)

Method:	7470A	Analysis Batch: 680-149950	Instrument ID:	LEEMAN1
Preparation:	7470A	Prep Batch: 680-149436	Lab File ID:	N/A
Dilution:	1.0		Initial Weight/Volume:	50 mL
Date Analyzed:	10/06/2009 1856		Final Weight/Volume:	50 mL
Date Prepared:	10/01/2009 1108			

Analyte	Result (ug/L)	Qualifier	RL
Mercury	<0.20		0.20

Analytical Data

Client: Ashland Inc.

Job Number: 680-51170-1

Client Sample ID: RB

Lab Sample ID: 680-51170-2RB

Client Matrix: Water

Date Sampled: 09/28/2009 1745

Date Received: 09/30/2009 0853

6010B Metals (ICP)

Method:	6010B	Analysis Batch: 680-149607	Instrument ID:	ICPD
Preparation:	3010A	Prep Batch: 680-149455	Lab File ID:	N/A
Dilution:	1.0		Initial Weight/Volume:	50 mL
Date Analyzed:	10/02/2009 2000		Final Weight/Volume:	50 mL
Date Prepared:	10/01/2009 1232			

Analyte	Result (ug/L)	Qualifier	RL
Arsenic	<20		20
Barium	11		10
Cadmium	<5.0		5.0
Chromium	<10		10
Lead	<10		10
Selenium	<20		20
Silver	<10		10

7470A Mercury (CVAA)

Method:	7470A	Analysis Batch: 680-149950	Instrument ID:	LEEMAN1
Preparation:	7470A	Prep Batch: 680-149436	Lab File ID:	N/A
Dilution:	1.0		Initial Weight/Volume:	50 mL
Date Analyzed:	10/06/2009 1905		Final Weight/Volume:	50 mL
Date Prepared:	10/01/2009 1108			

Analyte	Result (ug/L)	Qualifier	RL
Mercury	<0.20		0.20

Analytical Data

Client: Ashland Inc.

Job Number: 680-51170-1

Client Sample ID: MW-20

Lab Sample ID: 680-51170-3

Client Matrix: Water

Date Sampled: 09/29/2009 0720

Date Received: 09/30/2009 0853

6010B Metals (ICP)

Method:	6010B	Analysis Batch: 680-149607	Instrument ID:	ICPD
Preparation:	3010A	Prep Batch: 680-149455	Lab File ID:	N/A
Dilution:	1.0		Initial Weight/Volume:	50 mL
Date Analyzed:	10/02/2009 2005		Final Weight/Volume:	50 mL
Date Prepared:	10/01/2009 1232			

Analyte	Result (ug/L)	Qualifier	RL
Arsenic	<20		20
Barium	84		10
Cadmium	<5.0		5.0
Chromium	<10		10
Lead	<10		10
Selenium	<20		20
Silver	<10		10

7470A Mercury (CVAA)

Method:	7470A	Analysis Batch: 680-149950	Instrument ID:	LEEMAN1
Preparation:	7470A	Prep Batch: 680-149436	Lab File ID:	N/A
Dilution:	1.0		Initial Weight/Volume:	50 mL
Date Analyzed:	10/06/2009 1908		Final Weight/Volume:	50 mL
Date Prepared:	10/01/2009 1108			

Analyte	Result (ug/L)	Qualifier	RL
Mercury	<0.20		0.20

Analytical Data

Client: Ashland Inc.

Job Number: 680-51170-1

Client Sample ID: MW-22

Lab Sample ID: 680-51170-4

Client Matrix: Water

Date Sampled: 09/29/2009 0823

Date Received: 09/30/2009 0853

6010B Metals (ICP)

Method:	6010B	Analysis Batch: 680-149607	Instrument ID:	ICPD
Preparation:	3010A	Prep Batch: 680-149455	Lab File ID:	N/A
Dilution:	1.0		Initial Weight/Volume:	50 mL
Date Analyzed:	10/02/2009 2020		Final Weight/Volume:	50 mL
Date Prepared:	10/01/2009 1232			

Analyte	Result (ug/L)	Qualifier	RL
Arsenic	<20		20
Barium	130		10
Cadmium	<5.0		5.0
Chromium	<10		10
Lead	<10		10
Selenium	<20		20
Silver	<10		10

7470A Mercury (CVAA)

Method:	7470A	Analysis Batch: 680-149950	Instrument ID:	LEEMAN1
Preparation:	7470A	Prep Batch: 680-149436	Lab File ID:	N/A
Dilution:	1.0		Initial Weight/Volume:	50 mL
Date Analyzed:	10/06/2009 1911		Final Weight/Volume:	50 mL
Date Prepared:	10/01/2009 1108			

Analyte	Result (ug/L)	Qualifier	RL
Mercury	<0.20		0.20

Analytical Data

Client: Ashland Inc.

Job Number: 680-51170-1

Client Sample ID: MW-23

Lab Sample ID: 680-51170-5

Client Matrix: Water

Date Sampled: 09/29/2009 0945

Date Received: 09/30/2009 0853

6010B Metals (ICP)

Method:	6010B	Analysis Batch: 680-149607	Instrument ID:	ICPD
Preparation:	3010A	Prep Batch: 680-149455	Lab File ID:	N/A
Dilution:	1.0		Initial Weight/Volume:	50 mL
Date Analyzed:	10/02/2009 2026		Final Weight/Volume:	50 mL
Date Prepared:	10/01/2009 1232			

Analyte	Result (ug/L)	Qualifier	RL
Arsenic	26		20
Barium	51		10
Cadmium	<5.0		5.0
Chromium	<10		10
Lead	<10		10
Selenium	<20		20
Silver	<10		10

7470A Mercury (CVAA)

Method:	7470A	Analysis Batch: 680-149950	Instrument ID:	LEEMAN1
Preparation:	7470A	Prep Batch: 680-149436	Lab File ID:	N/A
Dilution:	1.0		Initial Weight/Volume:	50 mL
Date Analyzed:	10/06/2009 1914		Final Weight/Volume:	50 mL
Date Prepared:	10/01/2009 1108			

Analyte	Result (ug/L)	Qualifier	RL
Mercury	<0.20		0.20

Analytical Data

Client: Ashland Inc.

Job Number: 680-51170-1

Client Sample ID: Dup

Date Sampled: 09/29/2009 0000

Lab Sample ID: 680-51170-6FD

Date Received: 09/30/2009 0853

Client Matrix: Water

6010B Metals (ICP)

Method:	6010B	Analysis Batch: 680-149607	Instrument ID:	ICPD
Preparation:	3010A	Prep Batch: 680-149455	Lab File ID:	N/A
Dilution:	1.0		Initial Weight/Volume:	50 mL
Date Analyzed:	10/02/2009 2031		Final Weight/Volume:	50 mL
Date Prepared:	10/01/2009 1232			

Analyte	Result (ug/L)	Qualifier	RL
Arsenic	27		20
Barium	52		10
Cadmium	<5.0		5.0
Chromium	<10		10
Lead	<10		10
Selenium	<20		20
Silver	<10		10

7470A Mercury (CVAA)

Method:	7470A	Analysis Batch: 680-149950	Instrument ID:	LEEMAN1
Preparation:	7470A	Prep Batch: 680-149436	Lab File ID:	N/A
Dilution:	1.0		Initial Weight/Volume:	50 mL
Date Analyzed:	10/06/2009 1923		Final Weight/Volume:	50 mL
Date Prepared:	10/01/2009 1108			

Analyte	Result (ug/L)	Qualifier	RL
Mercury	<0.20		0.20

Analytical Data

Client: Ashland Inc.

Job Number: 680-51170-1

Client Sample ID: MW-21

Lab Sample ID: 680-51170-7

Client Matrix: Water

Date Sampled: 09/29/2009 1142

Date Received: 09/30/2009 0853

6010B Metals (ICP)

Method:	6010B	Analysis Batch: 680-149607	Instrument ID:	ICPD
Preparation:	3010A	Prep Batch: 680-149455	Lab File ID:	N/A
Dilution:	1.0		Initial Weight/Volume:	50 mL
Date Analyzed:	10/02/2009 2036		Final Weight/Volume:	50 mL
Date Prepared:	10/01/2009 1232			

Analyte	Result (ug/L)	Qualifier	RL
Arsenic	<20		20
Barium	65		10
Cadmium	<5.0		5.0
Chromium	<10		10
Lead	<10		10
Selenium	<20		20
Silver	<10		10

7470A Mercury (CVAA)

Method:	7470A	Analysis Batch: 680-149950	Instrument ID:	LEEMAN1
Preparation:	7470A	Prep Batch: 680-149436	Lab File ID:	N/A
Dilution:	1.0		Initial Weight/Volume:	50 mL
Date Analyzed:	10/06/2009 1926		Final Weight/Volume:	50 mL
Date Prepared:	10/01/2009 1108			

Analyte	Result (ug/L)	Qualifier	RL
Mercury	<0.20		0.20

DATA REPORTING QUALIFIERS

Client: Ashland Inc.

Job Number: 680-51170-1

Lab Section	Qualifier	Description
GC/MS VOA	*	LCS or LCSD exceeds the control limits
	F	MS or MSD exceeds the control limits
GC/MS Semi VOA	*	LCS or LCSD exceeds the control limits
	F	MS or MSD exceeds the control limits
	E	Result exceeded calibration range.
	F	RPD of the MS and MSD exceeds the control limits
	H	Sample was prepped or analyzed beyond the specified holding time
	X	Surrogate exceeds the control limits
	D	Surrogate or matrix spike recoveries were not obtained because the extract was diluted for analysis; also compounds analyzed at a dilution may be flagged with a D.
GC Semi VOA	X	Surrogate exceeds the control limits
	p	The %RPD between the primary and confirmation column/detector is >40%. The lower value has been reported.

QUALITY CONTROL RESULTS

Quality Control Results

Client: Ashland Inc.

Job Number: 680-51170-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC/MS VOA					
Analysis Batch:680-149440					
LCS 680-149440/21	Lab Control Sample	T	Water	8260B	
LCSD 680-149440/22	Lab Control Sample Duplicate	T	Water	8260B	
MB 680-149440/23	Method Blank	T	Water	8260B	
680-51170-8TB	Trip Blank	T	Water	8260B	
680-51170-9TB	Trip Blank	T	Water	8260B	
Analysis Batch:680-149463					
LCS 680-149463/4	Lab Control Sample	T	Water	8260B	
LCSD 680-149463/5	Lab Control Sample Duplicate	T	Water	8260B	
MB 680-149463/9	Method Blank	T	Water	8260B	
680-51170-1	MW-24	T	Water	8260B	
680-51170-1MS	Matrix Spike	T	Water	8260B	
680-51170-1MSD	Matrix Spike Duplicate	T	Water	8260B	
680-51170-2RB	RB	T	Water	8260B	
680-51170-3	MW-20	T	Water	8260B	
680-51170-4	MW-22	T	Water	8260B	
680-51170-5	MW-23	T	Water	8260B	
680-51170-6FD	Dup	T	Water	8260B	
680-51170-7	MW-21	T	Water	8260B	
680-51170-10TB	Trip Blank	T	Water	8260B	

Report Basis

T = Total

Quality Control Results

Client: Ashland Inc.

Job Number: 680-51170-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC/MS Semi VOA					
Prep Batch: 680-149426					
LCS 680-149426/9-A	Lab Control Sample	T	Water	3520C	
MB 680-149426/8-A	Method Blank	T	Water	3520C	
680-51170-1	MW-24	T	Water	3520C	
680-51170-1MS	Matrix Spike	T	Water	3520C	
680-51170-1MSD	Matrix Spike Duplicate	T	Water	3520C	
680-51170-2RB	RB	T	Water	3520C	
680-51170-3	MW-20	T	Water	3520C	
680-51170-4	MW-22	T	Water	3520C	
680-51170-5	MW-23	T	Water	3520C	
680-51170-6FD	Dup	T	Water	3520C	
680-51170-7	MW-21	T	Water	3520C	
Analysis Batch:680-149819					
LCS 680-149426/9-A	Lab Control Sample	T	Water	8270C	680-149426
MB 680-149426/8-A	Method Blank	T	Water	8270C	680-149426
680-51170-2RB	RB	T	Water	8270C	680-149426
Analysis Batch:680-150416					
680-51170-1	MW-24	T	Water	8270C	680-149426
680-51170-1MS	Matrix Spike	T	Water	8270C	680-149426
680-51170-1MSD	Matrix Spike Duplicate	T	Water	8270C	680-149426
680-51170-3	MW-20	T	Water	8270C	680-149426
680-51170-7	MW-21	T	Water	8270C	680-149426
Analysis Batch:680-150417					
680-51170-5	MW-23	T	Water	8270C	680-149426
680-51170-6FD	Dup	T	Water	8270C	680-149426
Analysis Batch:680-150498					
680-51170-4	MW-22	T	Water	8270C	680-149426
Prep Batch: 680-150728					
LCS 680-150728/21-A	Lab Control Sample	T	Water	3520C	
MB 680-150728/20-A	Method Blank	T	Water	3520C	
680-51170-1RE	MW-24	T	Water	3520C	
680-51170-1MSRE	Matrix Spike	T	Water	3520C	
680-51170-1MSDRE	Matrix Spike Duplicate	T	Water	3520C	
680-51170-2RBRE	RB	T	Water	3520C	
680-51170-3RE	MW-20	T	Water	3520C	
680-51170-4RE	MW-22	T	Water	3520C	
680-51170-5RE	MW-23	T	Water	3520C	
680-51170-6FDRE	Dup	T	Water	3520C	
680-51170-7RE	MW-21	T	Water	3520C	

Quality Control Results

Client: Ashland Inc.

Job Number: 680-51170-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC/MS Semi VOA					
Analysis Batch:680-151231					
LCS 680-150728/21-A	Lab Control Sample	T	Water	8270C	680-150728
MB 680-150728/20-A	Method Blank	T	Water	8270C	680-150728
680-51170-1RE	MW-24	T	Water	8270C	680-150728
680-51170-1MSRE	Matrix Spike	T	Water	8270C	680-150728
680-51170-3RE	MW-20	T	Water	8270C	680-150728
Analysis Batch:680-151289					
680-51170-1MSDRE	Matrix Spike Duplicate	T	Water	8270C	680-150728
680-51170-2RBRE	RB	T	Water	8270C	680-150728
680-51170-4RE	MW-22	T	Water	8270C	680-150728
680-51170-5RE	MW-23	T	Water	8270C	680-150728
680-51170-6FDRE	Dup	T	Water	8270C	680-150728
Analysis Batch:680-151383					
680-51170-7RE	MW-21	T	Water	8270C	680-150728

Report Basis

T = Total

Quality Control Results

Client: Ashland Inc.

Job Number: 680-51170-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC Semi VOA					
Prep Batch: 680-149433					
LCS 680-149433/11-A	Lab Control Sample	T	Water	3520C	
LCS 680-149433/14-A	Lab Control Sample	T	Water	3520C	
MB 680-149433/10-A	Method Blank	T	Water	3520C	
680-51170-1	MW-24	T	Water	3520C	
680-51170-1MS	Matrix Spike	T	Water	3520C	
680-51170-1MSD	Matrix Spike Duplicate	T	Water	3520C	
680-51170-2RB	RB	T	Water	3520C	
680-51170-3	MW-20	T	Water	3520C	
680-51170-4	MW-22	T	Water	3520C	
680-51170-5	MW-23	T	Water	3520C	
680-51170-6FD	Dup	T	Water	3520C	
680-51170-7	MW-21	T	Water	3520C	
Analysis Batch: 680-149832					
LCS 680-149433/11-A	Lab Control Sample	T	Water	8081A_8082	680-149433
LCS 680-149433/14-A	Lab Control Sample	T	Water	8081A_8082	680-149433
MB 680-149433/10-A	Method Blank	T	Water	8081A_8082	680-149433
680-51170-1	MW-24	T	Water	8081A_8082	680-149433
680-51170-1MS	Matrix Spike	T	Water	8081A_8082	680-149433
680-51170-1MSD	Matrix Spike Duplicate	T	Water	8081A_8082	680-149433
680-51170-2RB	RB	T	Water	8081A_8082	680-149433
680-51170-3	MW-20	T	Water	8081A_8082	680-149433
680-51170-4	MW-22	T	Water	8081A_8082	680-149433
680-51170-5	MW-23	T	Water	8081A_8082	680-149433
680-51170-6FD	Dup	T	Water	8081A_8082	680-149433
680-51170-7	MW-21	T	Water	8081A_8082	680-149433

Report Basis

T = Total

Quality Control Results

Client: Ashland Inc.

Job Number: 680-51170-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
Metals					
Prep Batch: 680-149436					
LCS 680-149436/16-A	Lab Control Sample	T	Water	7470A	
MB 680-149436/15-A	Method Blank	T	Water	7470A	
680-51170-1	MW-24	T	Water	7470A	
680-51170-1MS	Matrix Spike	T	Water	7470A	
680-51170-1MSD	Matrix Spike Duplicate	T	Water	7470A	
680-51170-2RB	RB	T	Water	7470A	
680-51170-3	MW-20	T	Water	7470A	
680-51170-4	MW-22	T	Water	7470A	
680-51170-5	MW-23	T	Water	7470A	
680-51170-6FD	Dup	T	Water	7470A	
680-51170-7	MW-21	T	Water	7470A	
Prep Batch: 680-149455					
LCS 680-149455/9-A	Lab Control Sample	T	Water	3010A	
MB 680-149455/8-A	Method Blank	T	Water	3010A	
680-51170-1	MW-24	T	Water	3010A	
680-51170-1MS	Matrix Spike	T	Water	3010A	
680-51170-1MSD	Matrix Spike Duplicate	T	Water	3010A	
680-51170-2RB	RB	T	Water	3010A	
680-51170-3	MW-20	T	Water	3010A	
680-51170-4	MW-22	T	Water	3010A	
680-51170-5	MW-23	T	Water	3010A	
680-51170-6FD	Dup	T	Water	3010A	
680-51170-7	MW-21	T	Water	3010A	
Analysis Batch: 680-149607					
LCS 680-149455/9-A	Lab Control Sample	T	Water	6010B	680-149455
MB 680-149455/8-A	Method Blank	T	Water	6010B	680-149455
680-51170-1	MW-24	T	Water	6010B	680-149455
680-51170-1MS	Matrix Spike	T	Water	6010B	680-149455
680-51170-1MSD	Matrix Spike Duplicate	T	Water	6010B	680-149455
680-51170-2RB	RB	T	Water	6010B	680-149455
680-51170-3	MW-20	T	Water	6010B	680-149455
680-51170-4	MW-22	T	Water	6010B	680-149455
680-51170-5	MW-23	T	Water	6010B	680-149455
680-51170-6FD	Dup	T	Water	6010B	680-149455
680-51170-7	MW-21	T	Water	6010B	680-149455

Quality Control Results

Client: Ashland Inc.

Job Number: 680-51170-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
Metals					
Analysis Batch:680-149950					
LCS 680-149436/16-A	Lab Control Sample	T	Water	7470A	680-149436
MB 680-149436/15-A	Method Blank	T	Water	7470A	680-149436
680-51170-1	MW-24	T	Water	7470A	680-149436
680-51170-1MS	Matrix Spike	T	Water	7470A	680-149436
680-51170-1MSD	Matrix Spike Duplicate	T	Water	7470A	680-149436
680-51170-2RB	RB	T	Water	7470A	680-149436
680-51170-3	MW-20	T	Water	7470A	680-149436
680-51170-4	MW-22	T	Water	7470A	680-149436
680-51170-5	MW-23	T	Water	7470A	680-149436
680-51170-6FD	Dup	T	Water	7470A	680-149436
680-51170-7	MW-21	T	Water	7470A	680-149436

Report Basis

T = Total

Quality Control Results

Client: Ashland Inc.

Job Number: 680-51170-1

Surrogate Recovery Report**8260B Volatile Organic Compounds (GC/MS)****Client Matrix: Water**

Lab Sample ID	Client Sample ID	BFB %Rec	DBFM %Rec	TOL %Rec
680-51170-1	MW-24	100	105	99
680-51170-2	RB	99	104	102
680-51170-3	MW-20	99	109	98
680-51170-4	MW-22	100	105	96
680-51170-5	MW-23	101	101	101
680-51170-6	Dup	100	103	103
680-51170-7	MW-21	101	105	99
680-51170-8	Trip Blank	101	105	116
680-51170-9	Trip Blank	100	105	118
680-51170-10	Trip Blank	97	103	103
MB 680-149440/23		102	104	101
MB 680-149463/9		101	102	103
LCS 680-149440/21		99	98	104
LCS 680-149463/4		100	102	100
LCSD 680-149440/22		97	99	103
LCSD 680-149463/5		99	100	99
680-51170-1 MS	MW-24 MS	98	100	103
680-51170-1 MSD	MW-24 MSD	98	102	103

Surrogate	Acceptance Limits
BFB = 4-Bromofluorobenzene	75-120
DBFM = Dibromofluoromethane	75-121
TOL = Toluene-d8 (Surf)	75-120

Quality Control Results

Client: Ashland Inc.

Job Number: 680-51170-1

Surrogate Recovery Report**8270C Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)****Client Matrix: Water**

Lab Sample ID	Client Sample ID	TBP %Rec	FBP %Rec	2FP %Rec	TPH %Rec	PHL %Rec	NBZ %Rec
680-51170-1	MW-24	87	68	69	82	69	70
680-51170-1 RE	MW-24 RE	71	75	67	28	67	75
680-51170-2 RE	RB RE	76	74	71	80	74	76
680-51170-2	RB	81	77	69	75	65	73
680-51170-3	MW-20	121	101	112X	56	110	109
680-51170-3 RE	MW-20 RE	60	62	55	29	56	63
680-51170-4	MW-22	0D	0D	0D	0D	0D	0D
680-51170-4 RE	MW-22 RE	0D	0D	0D	0D	0D	0D
680-51170-5	MW-23	0D	0D	0D	0D	0D	0D
680-51170-5 RE	MW-23 RE	0D	0D	0D	0D	0D	0D
680-51170-6	Dup	0D	0D	0D	0D	0D	0D
680-51170-6 RE	Dup RE	0D	0D	0D	0D	0D	0D
680-51170-7	MW-21	0D	0D	0D	0D	0D	0D
680-51170-7 RE	MW-21 RE	0D	0D	0D	0D	0D	0D
MB 680-149426/8-A		76	75	64	74	58	76
MB 680-150728/20-A		72	72	70	77	71	74
LCS 680-149426/9-A		83	77	78	79	77	83
LCS 680-150728/21-A		75	78	68	77	71	74
680-51170-1 MS	MW-24 MS	106	83	84	42	83	82
680-51170-1 MS RE	MW-24 MS RE	67	71	65	30	66	71
680-51170-1 MSD	MW-24 MSD	81	83	74	27	72	81
680-51170-1 MSD RE	MW-24 MSD RE	70	74	65	31	66	74

Surrogate	Acceptance Limits
TBP = 2,4,6-Tribromophenol	40-139
FBP = 2-Fluorobiphenyl	50-113
2FP = 2-Fluorophenol	36-110
TPH = Terphenyl-d14	10-121
PHL = Phenol-d5	38-116
NBZ = Nitrobenzene-d5	45-112

Quality Control Results

Client: Ashland Inc.

Job Number: 680-51170-1

Surrogate Recovery Report**8081A 8082 Organochlorine Pesticides & PCBs (GC)****Client Matrix: Water**

Lab Sample ID	Client Sample ID	DCB1 %Rec	DCB2 %Rec	TCX1 %Rec	TCX2 %Rec
680-51170-1	MW-24		18		54
680-51170-2	RB		58		56
680-51170-3	MW-20		11p X		67
680-51170-4	MW-22			11X	48
680-51170-5	MW-23		16		61
680-51170-6	Dup		16		68
680-51170-7	MW-21		24		75
MB 680-149433/10-A			76		82
LCS 680-149433/11-A				66	77
LCS 680-149433/14-A				84	68
680-51170-1 MS	MW-24 MS			21	53
680-51170-1 MSD	MW-24 MSD			17	65

Surrogate	Acceptance Limits
DCB = DCB Decachlorobiphenyl	14-115
TCX = Tetrachloro-m-xylene	35-120

Quality Control Results

Client: Ashland Inc.

Job Number: 680-51170-1

Method Blank - Batch: 680-149440

Method: 8260B

Preparation: 5030B

Lab Sample ID: MB 680-149440/23
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 09/30/2009 1200
Date Prepared: 09/30/2009 1200

Analysis Batch: 680-149440
Prep Batch: N/A
Units: ug/L

Instrument ID: GC/MS Volatiles - A
Lab File ID: aq527.d
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL

Analyte	Result	Qual	RL
Acetone	<25		25
Acetonitrile	<40		40
Acrolein	<20		20
Acrylonitrile	<20		20
Benzene	<1.0		1.0
Dichlorobromomethane	<1.0		1.0
Bromoform	<1.0		1.0
Bromomethane	<1.0		1.0
2-Butanone (MEK)	<10		10
Carbon disulfide	<2.0		2.0
Carbon tetrachloride	<1.0		1.0
Chlorobenzene	<1.0		1.0
Chloroethane	<1.0		1.0
Chloroform	<1.0		1.0
Chloromethane	<1.0		1.0
2-Chloro-1,3-butadiene	<1.0		1.0
3-Chloro-1-propene	<1.0		1.0
Chlorodibromomethane	<1.0		1.0
1,2-Dibromo-3-Chloropropane	<1.0		1.0
Ethylene Dibromide	<1.0		1.0
Dibromomethane	<1.0		1.0
trans-1,4-Dichloro-2-butene	<2.0		2.0
Dichlorodifluoromethane	<1.0		1.0
1,1-Dichloroethane	<1.0		1.0
1,2-Dichloroethane	<1.0		1.0
1,1-Dichloroethene	<1.0		1.0
cis-1,2-Dichloroethene	<1.0		1.0
trans-1,2-Dichloroethene	<1.0		1.0
1,2-Dichloropropane	<1.0		1.0
cis-1,3-Dichloropropene	<1.0		1.0
trans-1,3-Dichloropropene	<1.0		1.0
Ethylbenzene	<1.0		1.0
Ethyl methacrylate	<1.0		1.0
2-Hexanone	<10		10
Iodomethane	<5.0		5.0
Isobutyl alcohol	<40		40
Methacrylonitrile	<20		20
Methylene Chloride	<5.0		5.0
Methyl methacrylate	<1.0		1.0
4-Methyl-2-pentanone (MIBK)	<10		10
Pentachloroethane	<5.0		5.0

Calculations are performed before rounding to avoid round-off errors in calculated results.

Quality Control Results

Client: Ashland Inc.

Job Number: 680-51170-1

Method Blank - Batch: 680-149440

Method: 8260B
Preparation: 5030B

Lab Sample ID: MB 680-149440/23
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 09/30/2009 1200
Date Prepared: 09/30/2009 1200

Analysis Batch: 680-149440
Prep Batch: N/A
Units: ug/L

Instrument ID: GC/MS Volatiles - A
Lab File ID: aq527.d
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL

Analyte	Result	Qual	RL
Propionitrile	<20		20
Styrene	<1.0		1.0
1,1,1,2-Tetrachloroethane	<1.0		1.0
1,1,2,2-Tetrachloroethane	<1.0		1.0
Tetrachloroethene	<1.0		1.0
Toluene	<1.0		1.0
1,1,1-Trichloroethane	<1.0		1.0
1,1,2-Trichloroethane	<1.0		1.0
Trichloroethene	<1.0		1.0
Trichlorofluoromethane	<1.0		1.0
1,2,3-Trichloropropane	<1.0		1.0
Vinyl acetate	<2.0		2.0
Vinyl chloride	<1.0		1.0
Xylenes, Total	<2.0		2.0
Surrogate	% Rec	Acceptance Limits	
4-Bromofluorobenzene	102	75 - 120	
Dibromofluoromethane	104	75 - 121	
Toluene-d8 (Sur)	101	75 - 120	

Calculations are performed before rounding to avoid round-off errors in calculated results.

Quality Control Results

Client: Ashland Inc.

Job Number: 680-51170-1

**Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 680-149440**

Method: 8260B

Preparation: 5030B

LCS Lab Sample ID:	LCS 680-149440/21	Analysis Batch:	680-149440	Instrument ID:	GC/MS Volatiles - A
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	aq519.d
Dilution:	1.0	Units:	ug/L	Initial Weight/Volume:	5 mL
Date Analyzed:	09/30/2009 1002			Final Weight/Volume:	5 mL
Date Prepared:	09/30/2009 1002				

LCSD Lab Sample ID:	LCSD 680-149440/22	Analysis Batch:	680-149440	Instrument ID:	GC/MS Volatiles - A
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	aq521.d
Dilution:	1.0	Units:	ug/L	Initial Weight/Volume:	5 mL
Date Analyzed:	09/30/2009 1031			Final Weight/Volume:	5 mL
Date Prepared:	09/30/2009 1031				

Analyte	% Rec.						
	LCS	LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Acetone	91	100	17 - 175	9	50		
Benzene	103	103	77 - 119	0	30		
Dichlorobromomethane	97	99	78 - 127	2	30		
Bromoform	90	91	62 - 133	1	30		
Bromomethane	158	161	12 - 184	2	50		
2-Butanone (MEK)	95	95	33 - 157	0	30		
Carbon disulfide	154	150	55 - 131	3	30	*	*
Carbon tetrachloride	106	101	71 - 135	5	30		
Chlorobenzene	100	97	85 - 116	2	30		
Chloroethane	118	115	40 - 165	3	50		
Chloroform	106	104	82 - 120	2	30		
Chloromethane	125	120	48 - 142	5	50		
Chlorodibromomethane	93	93	75 - 133	0	30		
1,2-Dibromo-3-Chloropropane	91	93	49 - 140	2	30		
Ethylene Dibromide	98	102	80 - 121	5	30		
Dibromomethane	97	100	78 - 119	3	30		
Dichlorodifluoromethane	143	129	34 - 154	10	30		
1,1-Dichloroethane	109	103	74 - 127	5	30		
1,2-Dichloroethane	99	101	66 - 132	3	30		
1,1-Dichloroethene	123	116	62 - 141	6	30		
cis-1,2-Dichloroethene	110	112	69 - 134	2	30		
trans-1,2-Dichloroethene	106	104	72 - 131	2	30		
1,2-Dichloropropane	106	104	73 - 124	2	30		
cis-1,3-Dichloropropene	100	101	76 - 126	1	30		
trans-1,3-Dichloropropene	100	101	73 - 128	2	30		
Ethylbenzene	111	107	86 - 116	4	30		
2-Hexanone	96	97	34 - 161	1	30		
Methylene Chloride	100	101	70 - 125	1	30		
4-Methyl-2-pentanone (MIBK)	88	92	40 - 151	5	30		
Styrene	110	108	82 - 122	2	30		
1,1,1,2-Tetrachloroethane	94	92	81 - 128	2	30		
1,1,2,2-Tetrachloroethane	94	95	69 - 129	1	30		

Calculations are performed before rounding to avoid round-off errors in calculated results.

Quality Control Results

Client: Ashland Inc.

Job Number: 680-51170-1

Lab Control Sample/ Lab Control Sample Duplicate Recovery Report - Batch: 680-149440

Method: 8260B

Preparation: 5030B

LCS Lab Sample ID:	LCS 680-149440/21	Analysis Batch:	680-149440	Instrument ID:	GC/MS Volatiles - A
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	aq519.d
Dilution:	1.0	Units:	ug/L	Initial Weight/Volume:	5 mL
Date Analyzed:	09/30/2009 1002			Final Weight/Volume:	5 mL
Date Prepared:	09/30/2009 1002				

LCSD Lab Sample ID:	LCSD 680-149440/22	Analysis Batch:	680-149440	Instrument ID:	GC/MS Volatiles - A
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	aq521.d
Dilution:	1.0	Units:	ug/L	Initial Weight/Volume:	5 mL
Date Analyzed:	09/30/2009 1031			Final Weight/Volume:	5 mL
Date Prepared:	09/30/2009 1031				

Analyte	% Rec.		RPD	RPD Limit	LCS Qual	LCSD Qual
	LCS	LCSD				
Tetrachloroethene	104	100	76 - 126	4	30	
Toluene	103	105	81 - 117	2	30	
1,1,1-Trichloroethane	106	100	76 - 127	6	30	
1,1,2-Trichloroethane	95	101	75 - 121	6	30	
Trichloroethene	103	104	84 - 115	1	30	
Trichlorofluoromethane	127	117	58 - 149	8	50	
1,2,3-Trichloropropane	95	98	70 - 130	3	30	
Vinyl acetate	168	167	10 - 217	0	30	
Vinyl chloride	121	115	59 - 144	5	50	
Xylenes, Total	108	104	84 - 118	3	30	
Surrogate	LCS % Rec		LCSD % Rec		Acceptance Limits	
4-Bromofluorobenzene	99		97		75 - 120	
Dibromofluoromethane	98		99		75 - 121	
Toluene-d8 (Surr)	104		103		75 - 120	

Calculations are performed before rounding to avoid round-off errors in calculated results.

Quality Control Results

Client: Ashland Inc.

Job Number: 680-51170-1

Method Blank - Batch: 680-149463

Method: 8260B

Preparation: 5030B

Lab Sample ID: MB 680-149463/9
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 10/01/2009 1154
Date Prepared: 10/01/2009 1154

Analysis Batch: 680-149463
Prep Batch: N/A
Units: ug/L

Instrument ID: GC/MS Volatiles - A
Lab File ID: aq535.d
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL

Analyte	Result	Qual	RL
Acetone	<25		25
Acetonitrile	<40		40
Acrolein	<20		20
Acrylonitrile	<20		20
Benzene	<1.0		1.0
Dichlorobromomethane	<1.0		1.0
Bromoform	<1.0		1.0
Bromomethane	<1.0		1.0
2-Butanone (MEK)	<10		10
Carbon disulfide	<2.0		2.0
Carbon tetrachloride	<1.0		1.0
Chlorobenzene	<1.0		1.0
Chloroethane	<1.0		1.0
Chloroform	<1.0		1.0
Chloromethane	<1.0		1.0
2-Chloro-1,3-butadiene	<1.0		1.0
3-Chloro-1-propene	<1.0		1.0
Chlorodibromomethane	<1.0		1.0
1,2-Dibromo-3-Chloropropane	<1.0		1.0
Ethylene Dibromide	<1.0		1.0
Dibromomethane	<1.0		1.0
trans-1,4-Dichloro-2-butene	<2.0		2.0
Dichlorodifluoromethane	<1.0		1.0
1,1-Dichloroethane	<1.0		1.0
1,2-Dichloroethane	<1.0		1.0
1,1-Dichloroethene	<1.0		1.0
cis-1,2-Dichloroethene	<1.0		1.0
trans-1,2-Dichloroethene	<1.0		1.0
1,2-Dichloropropene	<1.0		1.0
cis-1,3-Dichloropropene	<1.0		1.0
trans-1,3-Dichloropropene	<1.0		1.0
Ethylbenzene	<1.0		1.0
Ethyl methacrylate	<1.0		1.0
2-Hexanone	<10		10
Iodomethane	<5.0		5.0
Isobutyl alcohol	<40		40
Methacrylonitrile	<20		20
Methylene Chloride	<5.0		5.0
Methyl methacrylate	<1.0		1.0
4-Methyl-2-pentanone (MIBK)	<10		10
Pentachloroethane	<5.0		5.0

Calculations are performed before rounding to avoid round-off errors in calculated results.

Quality Control Results

Client: Ashland Inc.

Job Number: 680-51170-1

Method Blank - Batch: 680-149463

Method: 8260B

Preparation: 5030B

Lab Sample ID: MB 680-149463/9
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 10/01/2009 1154
Date Prepared: 10/01/2009 1154

Analysis Batch: 680-149463
Prep Batch: N/A
Units: ug/L

Instrument ID: GC/MS Volatiles - A
Lab File ID: aq535.d
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL

Analyte	Result	Qual	RL
Propionitrile	<20		20
Styrene	<1.0		1.0
1,1,1,2-Tetrachloroethane	<1.0		1.0
1,1,2,2-Tetrachloroethane	<1.0		1.0
Tetrachloroethene	<1.0		1.0
Toluene	<1.0		1.0
1,1,1-Trichloroethane	<1.0		1.0
1,1,2-Trichloroethane	<1.0		1.0
Trichloroethene	<1.0		1.0
Trichlorofluoromethane	<1.0		1.0
1,2,3-Trichloropropane	<1.0		1.0
Vinyl acetate	<2.0		2.0
Vinyl chloride	<1.0		1.0
Xylenes, Total	<2.0		2.0
Surrogate	% Rec	Acceptance Limits	
4-Bromofluorobenzene	101	75 - 120	
Dibromofluoromethane	102	75 - 121	
Toluene-d8 (Surf)	103	75 - 120	

Calculations are performed before rounding to avoid round-off errors in calculated results.

Quality Control Results

Client: Ashland Inc.

Job Number: 680-51170-1

**Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 680-149463****Method: 8260B****Preparation: 5030B**

LCS Lab Sample ID:	LCS 680-149463/4	Analysis Batch:	680-149463	Instrument ID:	GC/MS Volatiles - A
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	aq531.d
Dilution:	1.0	Units:	ug/L	Initial Weight/Volume:	5 mL
Date Analyzed:	10/01/2009 1036			Final Weight/Volume:	5 mL
Date Prepared:	10/01/2009 1036				

LCSD Lab Sample ID:	LCSD 680-149463/5	Analysis Batch:	680-149463	Instrument ID:	GC/MS Volatiles - A
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	aq532.d
Dilution:	1.0	Units:	ug/L	Initial Weight/Volume:	5 mL
Date Analyzed:	10/01/2009 1055			Final Weight/Volume:	5 mL
Date Prepared:	10/01/2009 1055				

Analyte	LCS	LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Acetone	103	100	17 - 175	3	50		
Benzene	103	102	77 - 119	1	30		
Dichlorobromomethane	100	99	78 - 127	1	30		
Bromoform	94	92	62 - 133	3	30		
Bromomethane	153	161	12 - 184	5	50		
2-Butanone (MEK)	97	98	33 - 157	1	30		
Carbon disulfide	160	159	55 - 131	0	30	*	*
Carbon tetrachloride	107	106	71 - 135	1	30		
Chlorobenzene	99	98	85 - 116	1	30		
Chloroethane	124	124	40 - 165	0	50		
Chloroform	106	106	82 - 120	0	30		
Chloromethane	131	129	48 - 142	1	50		
Chlorodibromomethane	91	91	75 - 133	0	30		
1,2-Dibromo-3-Chloropropane	93	92	49 - 140	2	30		
Ethylene Dibromide	99	98	80 - 121	1	30		
Dibromomethane	97	97	78 - 119	0	30		
Dichlorodifluoromethane	147	145	34 - 154	1	30		
1,1-Dichloroethane	109	108	74 - 127	1	30		
1,2-Dichloroethane	100	96	66 - 132	4	30		
1,1-Dichloroethene	123	122	62 - 141	1	30		
cis-1,2-Dichloroethene	114	114	69 - 134	0	30		
trans-1,2-Dichloroethene	109	110	72 - 131	1	30		
1,2-Dichloropropane	103	102	73 - 124	1	30		
cis-1,3-Dichloropropene	107	100	76 - 126	7	30		
trans-1,3-Dichloropropene	96	95	73 - 128	1	30		
Ethylbenzene	113	110	86 - 116	3	30		
2-Hexanone	99	96	34 - 161	3	30		
Methylene Chloride	102	100	70 - 125	1	30		
4-Methyl-2-pentanone (MIBK)	94	91	40 - 151	2	30		
Styrene	112	110	82 - 122	1	30		
1,1,1,2-Tetrachloroethane	94	93	81 - 128	1	30		
1,1,2,2-Tetrachloroethane	97	96	69 - 129	1	30		

Calculations are performed before rounding to avoid round-off errors in calculated results.

Quality Control Results

Client: Ashland Inc.

Job Number: 680-51170-1

**Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 680-149463**

Method: 8260B

Preparation: 5030B

LCS Lab Sample ID:	LCS 680-149463/4	Analysis Batch:	680-149463	Instrument ID:	GC/MS Volatiles - A
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	aq531.d
Dilution:	1.0	Units:	ug/L	Initial Weight/Volume:	5 mL
Date Analyzed:	10/01/2009 1036			Final Weight/Volume:	5 mL
Date Prepared:	10/01/2009 1036				

LCSD Lab Sample ID:	LCSD 680-149463/5	Analysis Batch:	680-149463	Instrument ID:	GC/MS Volatiles - A
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	aq532.d
Dilution:	1.0	Units:	ug/L	Initial Weight/Volume:	5 mL
Date Analyzed:	10/01/2009 1055			Final Weight/Volume:	5 mL
Date Prepared:	10/01/2009 1055				

Analyte	% Rec.		RPD	RPD Limit	LCS Qual	LCSD Qual
	LCS	LCSD				
Tetrachloroethene	102	102	76 - 126	0	30	
Toluene	99	99	81 - 117	0	30	
1,1,1-Trichloroethane	104	104	76 - 127	1	30	
1,1,2-Trichloroethane	93	94	75 - 121	2	30	
Trichloroethene	104	104	84 - 115	0	30	
Trichlorofluoromethane	129	131	58 - 149	1	50	
1,2,3-Trichloropropane	99	96	70 - 130	3	30	
Vinyl acetate	170	170	10 - 217	0	30	
Vinyl chloride	123	122	59 - 144	1	50	
Xylenes, Total	109	107	84 - 118	2	30	
Surrogate	LCS % Rec		LCSD % Rec		Acceptance Limits	
4-Bromofluorobenzene	100		99		75 - 120	
Dibromofluoromethane	102		100		75 - 121	
Toluene-d8 (Sur)	100		99		75 - 120	

Calculations are performed before rounding to avoid round-off errors in calculated results.

Quality Control Results

Client: Ashland Inc.

Job Number: 680-51170-1

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 680-149463**

Method: 8260B

Preparation: 5030B

MS Lab Sample ID:	680-51170-1	Analysis Batch:	680-149463	Instrument ID:	GC/MS Volatiles - A
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	a1079.d
Dilution:	1.0			Initial Weight/Volume:	5 mL
Date Analyzed:	10/01/2009 2014			Final Weight/Volume:	5 mL
Date Prepared:	10/01/2009 2014				

MSD Lab Sample ID:	680-51170-1	Analysis Batch:	680-149463	Instrument ID:	GC/MS Volatiles - A
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	a1080.d
Dilution:	1.0			Initial Weight/Volume:	5 mL
Date Analyzed:	10/01/2009 2043			Final Weight/Volume:	5 mL
Date Prepared:	10/01/2009 2043				

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Acetone	86	88	17 - 175	2	50		
Benzene	102	101	77 - 119	0	30		
Dichlorobromomethane	93	90	78 - 127	4	30		
Bromoform	88	87	62 - 133	1	30		
Bromomethane	145	167	12 - 184	14	50		
2-Butanone (MEK)	87	89	33 - 157	2	30		
Carbon disulfide	160	161	55 - 131	1	30	F	F
Carbon tetrachloride	109	109	71 - 135	0	30		
Chlorobenzene	101	99	85 - 116	2	30		
Chloroethane	122	120	40 - 165	2	50		
Chloroform	106	108	82 - 120	1	30		
Chloromethane	124	128	48 - 142	3	50		
Chlorodibromomethane	90	91	75 - 133	0	30		
1,2-Dibromo-3-Chloropropane	82	88	49 - 140	6	30		
Ethylene Dibromide	93	91	80 - 121	2	30		
Dibromomethane	96	94	78 - 119	2	30		
Dichlorodifluoromethane	154	153	34 - 154	1	30		
1,1-Dichloroethane	106	107	74 - 127	1	30		
1,2-Dichloroethane	99	97	66 - 132	2	30		
cis-1,2-Dichloroethene	112	112	69 - 134	1	30		
trans-1,2-Dichloroethene	111	111	72 - 131	0	30		
1,1-Dichloroethene	130	128	62 - 141	1	30		
1,2-Dichloropropane	100	99	73 - 124	1	30		
cis-1,3-Dichloropropene	92	92	76 - 126	0	30		
trans-1,3-Dichloropropene	87	90	73 - 128	3	30		
Ethylbenzene	114	114	86 - 116	1	30		
2-Hexanone	88	86	34 - 161	2	30		
Methylene Chloride	98	100	70 - 125	1	30		
4-Methyl-2-pentanone (MIBK)	83	83	40 - 151	0	30		

Calculations are performed before rounding to avoid round-off errors in calculated results.

Quality Control Results

Client: Ashland Inc.

Job Number: 680-51170-1

Matrix Spike/ Matrix Spike Duplicate Recovery Report - Batch: 680-149463

Method: 8260B

Preparation: 5030B

MS Lab Sample ID: 680-51170-1 Analysis Batch: 680-149463
Client Matrix: Water Prep Batch: N/A
Dilution: 1.0
Date Analyzed: 10/01/2009 2014
Date Prepared: 10/01/2009 2014

Instrument ID: GC/MS Volatiles - A
Lab File ID: a1079.d
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL

MSD Lab Sample ID: 680-51170-1 Analysis Batch: 680-149463
Client Matrix: Water Prep Batch: N/A
Dilution: 1.0
Date Analyzed: 10/01/2009 2043
Date Prepared: 10/01/2009 2043

Instrument ID: GC/MS Volatiles - A
Lab File ID: a1080.d
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Styrene	112	111	82 - 122	1	30		
1,1,1,2-Tetrachloroethane	92	92	81 - 128	1	30		
1,1,2,2-Tetrachloroethane	96	93	69 - 129	3	30		
Tetrachloroethene	109	109	76 - 126	0	30		
Toluene	104	105	81 - 117	0	30		
1,1,1-Trichloroethane	106	105	76 - 127	1	30		
1,1,2-Trichloroethane	91	93	75 - 121	2	30		
Trichloroethene	106	106	84 - 115	0	30		
Trichlorofluoromethane	134	136	58 - 149	1	50		
1,2,3-Trichloropropane	97	93	70 - 130	4	30		
Vinyl acetate	147	147	10 - 217	0	30		
Vinyl chloride	126	126	59 - 144	1	50		
Xylenes, Total	111	110	84 - 118	1	30		
Surrogate	MS % Rec		MSD % Rec		Acceptance Limits		
4-Bromofluorobenzene	98		98		75 - 120		
Dibromofluoromethane	100		102		75 - 121		
Toluene-d8 (Sur)	103		103		75 - 120		

Calculations are performed before rounding to avoid round-off errors in calculated results.

Quality Control Results

Client: Ashland Inc.

Job Number: 680-51170-1

Method Blank - Batch: 680-149426

Method: 8270C

Preparation: 3520C

Lab Sample ID: MB 680-149426/8-A
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 10/05/2009 2308
Date Prepared: 10/01/2009 1512

Analysis Batch: 680-149819
Prep Batch: 680-149426
Units: ug/L

Instrument ID: GC/MS SemiVolatiles - T
Lab File ID: t3667.d
Initial Weight/Volume: 1000 mL
Final Weight/Volume: 1 mL
Injection Volume:

Analyte	Result	Qual	RL
Acenaphthene	<10		10
Acenaphthylene	<10		10
Acetophenone	<10		10
2-Acetylaminofluorene	<10		10
alpha,alpha-Dimethyl phenethylamine	<2000		2000
4-Aminobiphenyl	<10		10
Aniline	<20		20
Anthracene	<10		10
Aramite, Total	<10		10
Benzo[a]anthracene	<10		10
Benzo[a]pyrene	<10		10
Benzo[b]fluoranthene	<10		10
Benzo[g,h,i]perylene	<10		10
Benzo[k]fluoranthene	<10		10
Benzyl alcohol	<10		10
1,1'-Biphenyl	<10		10
Bis(2-chloroethoxy)methane	<10		10
Bis(2-chloroethyl)ether	<10		10
bis(chloroisopropyl) ether	<10		10
Bis(2-ethylhexyl) phthalate	<10		10
4-Bromophenyl phenyl ether	<10		10
Butyl benzyl phthalate	<10		10
4-Chloroaniline	<20		20
4-Chloro-3-methylphenol	<10		10
2-Choronaphthalene	<10		10
2-Chlorophenol	<10		10
4-Chlorophenyl phenyl ether	<10		10
Chrysene	<10		10
Diallate	<10		10
Dibenz(a,h)anthracene	<10		10
Dibenzofuran	<10		10
1,2-Dichlorobenzene	<10		10
1,3-Dichlorobenzene	<10		10
1,4-Dichlorobenzene	<10		10
3,3'-Dichlorobenzidine	<20		20
2,4-Dichlorophenol	<10		10
2,6-Dichlorophenol	<10		10
Diethyl phthalate	<10		10
Dimethoate	<10		10
7,12-Dimethylbenz(a)anthracene	<10		10
3,3'-Dimethylbenzidine	<20		20

Calculations are performed before rounding to avoid round-off errors in calculated results.

Quality Control Results

Client: Ashland Inc.

Job Number: 680-51170-1

Method Blank - Batch: 680-149426

Method: 8270C

Preparation: 3520C

Lab Sample ID: MB 680-149426/8-A
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 10/05/2009 2308
Date Prepared: 10/01/2009 1512

Analysis Batch: 680-149819
Prep Batch: 680-149426
Units: ug/L

Instrument ID: GC/MS SemiVolatiles - T
Lab File ID: t3667.d
Initial Weight/Volume: 1000 mL
Final Weight/Volume: 1 mL
Injection Volume:

Analyte	Result	Qual	RL
2,4-Dimethylphenol	<10		10
Dimethyl phthalate	<10		10
Di-n-butyl phthalate	<10		10
1,3-Dinitrobenzene	<10		10
4,6-Dinitro-2-methylphenol	<50		50
2,4-Dinitrophenol	<50		50
2,4-Dinitrotoluene	<10		10
2,6-Dinitrotoluene	<10		10
Di-n-octyl phthalate	<10		10
Dinoseb	<10		10
1,4-Dioxane	<10		10
Disulfoton	<10		10
Ethyl methanesulfonate	<10		10
Ethyl Parathion	<10		10
Famphur	<10		10
Fluoranthene	<10		10
Fluorene	<10		10
Hexachlorobenzene	<10		10
Hexachlorobutadiene	<10		10
Hexachlorocyclopentadiene	<10		10
Hexachloroethane	<10		10
Hexachlorophene	<5000		5000
Hexachloropropene	<10		10
Indeno[1,2,3-cd]pyrene	<10		10
Isophorone	<10		10
Isosafrole	<10		10
Methapyrilene	<2000		2000
3-Methylcholanthrene	<10		10
Methyl methanesulfonate	<10		10
2-Methylnaphthalene	<10		10
Methyl parathion	<10		10
2-Methylphenol	<10		10
3 & 4 Methylphenol	<10		10
Naphthalene	<10		10
1,4-Naphthoquinone	<10		10
1-Naphthylamine	<10		10
2-Naphthylamine	<10		10
2-Nitroaniline	<50		50
3-Nitroaniline	<50		50
4-Nitroaniline	<50		50
Nitrobenzene	<10		10

Calculations are performed before rounding to avoid round-off errors in calculated results.

Quality Control Results

Client: Ashland Inc.

Job Number: 680-51170-1

Method Blank - Batch: 680-149426

Method: 8270C

Preparation: 3520C

Lab Sample ID: MB 680-149426/8-A
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 10/05/2009 2308
Date Prepared: 10/01/2009 1512

Analysis Batch: 680-149819
Prep Batch: 680-149426
Units: ug/L

Instrument ID: GC/MS SemiVolatiles - T
Lab File ID: t3667.d
Initial Weight/Volume: 1000 mL
Final Weight/Volume: 1 mL
Injection Volume:

Analyte	Result	Qual	RL
2-Nitrophenol	<10		10
4-Nitrophenol	<50		50
4-Nitroquinoline-1-oxide	<20		20
N-Nitro-o-toluidine	<10		10
N-Nitrosodiethylamine	<10		10
N-Nitrosodimethylamine	<10		10
N-Nitrosodi-n-butylamine	<10		10
N-Nitrosodi-n-propylamine	<10		10
N-Nitrosodiphenylamine	<10		10
N-Nitrosomethylethylamine	<10		10
N-Nitrosomorpholine	<10		10
N-Nitrosopiperidine	<10		10
N-Nitrosopyrrolidine	<10		10
o,o',o"-Triethylphosphorothioate	<10		10
p-Dimethylamino azobenzene	<10		10
Pentachlorobenzene	<10		10
Pentachloronitrobenzene	<10		10
Pentachlorophenol	<50		50
Phenacetin	<10		10
Phenanthrene	<10		10
Phenol	<10		10
Phorate	<10		10
2-Picoline	<10		10
p-Phenylenediamine	<2000		2000
Pronamide	<10		10
Pyrene	<10		10
Pyridine	<50		50
Safrole, Total	<10		10
Sulfotep	<10		10
1,2,4,5-Tetrachlorobenzene	<10		10
2,3,4,6-Tetrachlorophenol	<10		10
Thionazin	<10		10
2-Toluidine	<10		10
1,2,4-Trichlorobenzene	<10		10
2,4,5-Trichlorophenol	<10		10
2,4,6-Trichlorophenol	<10		10
1,3,5-Trinitrobenzene	<10		10

Surrogate	% Rec	Acceptance Limits
2,4,6-Tribromophenol	76	40 - 139
2-Fluorobiphenyl	75	50 - 113

Calculations are performed before rounding to avoid round-off errors in calculated results.

Quality Control Results

Client: Ashland Inc.

Job Number: 680-51170-1

Surrogate	% Rec	Acceptance Limits
2-Fluorophenol	64	36 - 110
Terphenyl-d14	74	10 - 121
Phenol-d5	58	38 - 116
Nitrobenzene-d5	76	45 - 112

Calculations are performed before rounding to avoid round-off errors in calculated results.

Quality Control Results

Client: Ashland Inc.

Job Number: 680-51170-1

Lab Control Sample - Batch: 680-149426

Method: 8270C
Preparation: 3520C

Lab Sample ID: LCS 680-149426/9-A
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 10/05/2009 2332
Date Prepared: 10/01/2009 1512

Analysis Batch: 680-149819
Prep Batch: 680-149426
Units: ug/L

Instrument ID: GC/MS SemiVolatiles - T
Lab File ID: t3668.d
Initial Weight/Volume: 1000 mL
Final Weight/Volume: 1 mL
Injection Volume:

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Acenaphthene	100	72.8	73	45 - 117	
Acenaphthylene	100	73.6	74	51 - 112	
Acetophenone	100	74.3	74	25 - 110	
2-Acetylaminofluorene	100	115	115	69 - 123	
alpha,alpha-Dimethyl phenethylamine	500	<2000	0	10 - 158	*
4-Aminobiphenyl	100	36.2	36	10 - 130	
Aniline	100	<20	13	10 - 114	
Anthracene	100	73.1	73	52 - 116	
Aramite, Total	100	106	106	10 - 150	
Benzo[a]anthracene	100	87.1	87	49 - 124	
Benzo[a]pyrene	100	77.6	78	48 - 120	
Benzo[b]fluoranthene	100	95.9	96	46 - 126	
Benzo[g,h,i]perylene	100	73.2	73	51 - 117	
Benzo[k]fluoranthene	100	54.4	54	47 - 126	
Benzyl alcohol	100	70.0	70	34 - 113	
1,1'-Biphenyl	100	65.5	66	47 - 112	
Bis(2-chloroethoxy)methane	100	121	121	50 - 112	*
Bis(2-chloroethyl)ether	100	83.3	83	43 - 110	
bis(chloroisopropyl) ether	100	89.6	90	42 - 110	
Bis(2-ethylhexyl) phthalate	100	85.8	86	47 - 134	
4-Bromophenyl phenyl ether	100	76.3	76	42 - 110	
Butyl benzyl phthalate	100	91.9	92	52 - 135	
4-Chloroaniline	100	60.0	60	10 - 110	
4-Chloro-3-methylphenol	100	84.1	84	46 - 118	
2-Chloronaphthalene	100	77.1	77	47 - 110	
2-Chlorophenol	100	77.3	77	47 - 110	
4-Chlorophenyl phenyl ether	100	75.9	76	46 - 114	
Chrysene	100	76.7	77	51 - 123	
Diallate	100	105	105	36 - 145	
Dibenz(a,h)anthracene	100	89.9	90	46 - 124	
Dibenzofuran	100	74.3	74	50 - 112	
1,2-Dichlorobenzene	100	67.8	68	39 - 110	
1,3-Dichlorobenzene	100	63.6	64	36 - 110	
1,4-Dichlorobenzene	100	65.6	66	38 - 110	
3,3'-Dichlorobenzidine	100	86.5	86	10 - 113	
2,4-Dichlorophenol	100	77.8	78	46 - 115	
2,6-Dichlorophenol	100	88.8	89	46 - 130	
Diethyl phthalate	100	88.0	88	51 - 119	
Dimethoate	100	78.2	78	28 - 142	
7,12-Dimethylbenz(a)anthracene	100	63.7	64	39 - 130	
3,3'-Dimethylbenzidine	100	<20	3	10 - 130	*

Calculations are performed before rounding to avoid round-off errors in calculated results.

Quality Control Results

Client: Ashland Inc.

Job Number: 680-51170-1

Lab Control Sample - Batch: 680-149426

Method: 8270C

Preparation: 3520C

Lab Sample ID: LCS 680-149426/9-A

Client Matrix: Water

Dilution: 1.0

Date Analyzed: 10/05/2009 2332

Date Prepared: 10/01/2009 1512

Analysis Batch: 680-149819

Prep Batch: 680-149426

Units: ug/L

Instrument ID: GC/MS SemiVolatiles - T

Lab File ID: t3668.d

Initial Weight/Volume: 1000 mL

Final Weight/Volume: 1 mL

Injection Volume:

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
2,4-Dimethylphenol	200	150	75	36 - 110	
Dimethyl phthalate	100	86.6	87	50 - 116	
Di-n-butyl phthalate	100	73.4	73	49 - 123	
1,3-Dinitrobenzene	100	98.3	98	53 - 136	
4,6-Dinitro-2-methylphenol	100	87.5	87	29 - 167	
2,4-Dinitrophenol	100	103	103	10 - 189	
2,4-Dinitrotoluene	100	78.2	78	49 - 128	
2,6-Dinitrotoluene	100	78.0	78	45 - 131	
Di-n-octyl phthalate	100	90.9	91	44 - 134	
Dinoseb	100	88.7	89	50 - 144	
1,4-Dioxane	100	39.2	39	11 - 110	
Disulfoton	100	85.1	85	40 - 130	
Ethyl methanesulfonate	100	84.5	85	32 - 130	
Ethyl Parathion	100	91.4	91	60 - 140	
Famphur	100	77.5	77	10 - 130	
Fluoranthene	100	68.2	68	50 - 120	
Fluorene	100	75.0	75	50 - 115	
Hexachlorobenzene	100	74.5	75	48 - 119	
Hexachlorobutadiene	100	69.4	69	40 - 110	
Hexachlorocyclopentadiene	100	61.7	62	10 - 110	
Hexachloroethane	100	64.0	64	33 - 110	
Hexachlorophene	500	<5000	26	10 - 130	
Hexachloropropene	100	31.8	32	10 - 130	
Indeno[1,2,3-cd]pyrene	100	92.3	92	40 - 126	
Isophorone	100	83.0	83	50 - 111	
Isosafrole	100	89.7	90	37 - 130	
Methapyrilene	100	<2000	0	10 - 130	*
3-Methylcholanthrene	100	78.5	79	62 - 130	
Methyl methanesulfonate	100	<10	4	10 - 130	*
2-Methylnaphthalene	100	82.5	83	46 - 110	
Methyl parathion	100	84.4	84	51 - 146	
2-Methylphenol	100	83.7	84	46 - 110	
3 & 4 Methylphenol	100	76.4	76	43 - 110	
Naphthalene	100	88.2	88	41 - 110	
1,4-Naphthoquinone	100	11.2	11	10 - 130	
1-Naphthylamine	100	<10	0	10 - 130	*
2-Naphthylamine	100	30.8	31	10 - 130	
2-Nitroaniline	100	76.7	77	45 - 122	
3-Nitroaniline	100	75.4	75	30 - 116	
4-Nitroaniline	100	74.9	75	36 - 125	
Nitrobenzene	100	74.5	75	46 - 110	

Calculations are performed before rounding to avoid round-off errors in calculated results.

Quality Control Results

Client: Ashland Inc.

Job Number: 680-51170-1

Lab Control Sample - Batch: 680-149426

Method: 8270C
Preparation: 3520C

Lab Sample ID: LCS 680-149426/9-A
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 10/05/2009 2332
Date Prepared: 10/01/2009 1512

Analysis Batch: 680-149819
Prep Batch: 680-149426
Units: ug/L

Instrument ID: GC/MS SemiVolatiles - T
Lab File ID: t3668.d
Initial Weight/Volume: 1000 mL
Final Weight/Volume: 1 mL
Injection Volume:

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
2-Nitrophenol	100	76.2	76	42 - 120	
4-Nitrophenol	100	72.4	72	30 - 122	
4-Nitroquinoline-1-oxide	100	22.9	23	10 - 151	
N-Nitro-o-toluidine	100	84.2	84	45 - 130	
N-Nitrosodiethylamine	100	84.4	84	48 - 130	
N-Nitrosodimethylamine	100	70.3	70	33 - 110	
N-Nitrosodi-n-butylamine	100	121	121	41 - 130	
N-Nitrosodi-n-propylamine	100	85.7	86	45 - 112	
N-Nitrosodiphenylamine	100	85.8	86	47 - 119	
N-Nitrosomethylethylamine	100	97.1	97	47 - 130	
N-Nitrosomorpholine	100	93.3	93	35 - 130	
N-Nitrosopiperidine	100	91.6	92	53 - 130	
N-Nitrosopyrrolidine	100	73.3	73	50 - 130	
o,o",o"-Triethylphosphorothioate	100	147	147	23 - 162	E
p-Dimethylamino azobenzene	100	105	105	29 - 169	
Pentachlorobenzene	100	79.6	80	52 - 130	
Pentachloronitrobenzene	100	96.9	97	52 - 130	
Pentachlorophenol	100	82.4	82	37 - 132	
Phenacetin	100	85.5	86	62 - 130	
Phenanthrene	100	72.7	73	52 - 117	
Phenol	100	76.1	76	39 - 110	
Phorate	100	115	115	29 - 181	
2-Picoline	100	<10	1	10 - 130	*
p-Phenylenediamine	500	<2000	0	10 - 130	*
Pronamide	100	99.8	100	64 - 134	
Pyrene	100	78.7	79	52 - 125	
Pyridine	100	<50	1	10 - 110	*
Safrole, Total	100	91.4	91	39 - 130	
Sulfotep	100	112	112	44 - 130	
1,2,4,5-Tetrachlorobenzene	100	75.7	76	41 - 130	
2,3,4,6-Tetrachlorophenol	100	99.1	99	38 - 130	
Thionazin	100	83.4	83	48 - 135	
2-Toluidine	100	37.7	38	27 - 130	
1,2,4-Trichlorobenzene	100	70.1	70	41 - 110	
2,4,5-Trichlorophenol	100	78.5	79	47 - 122	
2,4,6-Trichlorophenol	100	77.3	77	46 - 120	
1,3,5-Trinitrobenzene	100	94.0	94	10 - 200	
Surrogate		% Rec		Acceptance Limits	
2,4,6-Tribromophenol		83		40 - 139	
2-Fluorobiphenyl		77		50 - 113	

Calculations are performed before rounding to avoid round-off errors in calculated results.

Quality Control Results

Client: Ashland Inc.

Job Number: 680-51170-1

Surrogate	% Rec	Acceptance Limits
2-Fluorophenol	78	36 - 110
Terphenyl-d14	79	10 - 121
Phenol-d5	77	38 - 116
Nitrobenzene-d5	83	45 - 112

Calculations are performed before rounding to avoid round-off errors in calculated results.

Quality Control Results

Client: Ashland Inc.

Job Number: 680-51170-1

Matrix Spike/ Matrix Spike Duplicate Recovery Report - Batch: 680-149426

Method: 8270C

Preparation: 3520C

MS Lab Sample ID:	680-51170-1	Analysis Batch:	680-150416	Instrument ID:	GC/MS SemiVolatiles - G
Client Matrix:	Water	Prep Batch:	680-149426	Lab File ID:	g5587.d
Dilution:	1.0			Initial Weight/Volume:	1030 mL
Date Analyzed:	10/12/2009 1358			Final Weight/Volume:	1 mL
Date Prepared:	10/01/2009 1512			Injection Volume:	

MSD Lab Sample ID:	680-51170-1	Analysis Batch:	680-150416	Instrument ID:	GC/MS SemiVolatiles - G
Client Matrix:	Water	Prep Batch:	680-149426	Lab File ID:	g5588.d
Dilution:	1.0			Initial Weight/Volume:	1030 mL
Date Analyzed:	10/12/2009 1422			Final Weight/Volume:	1 mL
Date Prepared:	10/01/2009 1512			Injection Volume:	

Analyte	% Rec.		RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD				
Acenaphthene	85	82	45 - 117	4	40	
Acenaphthylene	83	79	51 - 112	4	40	
Acetophenone	74	63	25 - 110	16	40	
2-Acetylaminofluorene	106	105	69 - 123	1	40	
alpha,alpha-Dimethyl phenethylamine	0	21	10 - 158	NC	40	F
4-Aminobiphenyl	11	39	10 - 130	113	40	F
Aniline	76	63	10 - 114	18	40	
Anthracene	83	80	52 - 116	3	40	
Aramite, Total	104	91	10 - 150	13	40	
Benzo[a]anthracene	87	79	49 - 124	10	40	
Benzo[a]pyrene	96	91	48 - 120	5	40	
Benzo[b]fluoranthene	106	106	46 - 126	0	40	
Benzo[g,h,i]perylene	78	70	51 - 117	11	40	
Benzo[k]fluoranthene	73	63	47 - 126	14	40	
Benzyl alcohol	82	80	34 - 113	3	40	
1,1'-Biphenyl	82	81	47 - 112	2	40	
Bis(2-chloroethoxy)methane	109	106	50 - 112	2	40	
Bis(2-chloroethyl)ether	98	97	43 - 110	1	40	
bis(chloroisopropyl) ether	80	77	42 - 110	3	40	
Bis(2-ethylhexyl) phthalate	96	87	47 - 134	10	40	
4-Bromophenyl phenyl ether	92	85	42 - 110	7	40	
Butyl benzyl phthalate	96	87	52 - 135	9	40	
4-Chloroaniline	26	59	10 - 110	76	40	F
4-Chloro-3-methylphenol	92	79	46 - 118	14	40	
2-Chloronaphthalene	84	83	47 - 110	1	40	
2-Chlorophenol	82	76	47 - 110	7	40	
4-Chlorophenyl phenyl ether	91	85	46 - 114	7	40	
Chrysene	86	81	51 - 123	6	40	
Diallate	93	93	36 - 145	0	40	

Calculations are performed before rounding to avoid round-off errors in calculated results.

Quality Control Results

Client: Ashland Inc.

Job Number: 680-51170-1

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 680-149426**

**Method: 8270C
Preparation: 3520C**

MS Lab Sample ID:	680-51170-1	Analysis Batch:	680-150416	Instrument ID:	GC/MS SemiVolatiles - G
Client Matrix:	Water	Prep Batch:	680-149426	Lab File ID:	g5587.d
Dilution:	1.0			Initial Weight/Volume:	1030 mL
Date Analyzed:	10/12/2009 1358			Final Weight/Volume:	1 mL
Date Prepared:	10/01/2009 1512			Injection Volume:	

MSD Lab Sample ID:	680-51170-1	Analysis Batch:	680-150416	Instrument ID:	GC/MS SemiVolatiles - G
Client Matrix:	Water	Prep Batch:	680-149426	Lab File ID:	g5588.d
Dilution:	1.0			Initial Weight/Volume:	1030 mL
Date Analyzed:	10/12/2009 1422			Final Weight/Volume:	1 mL
Date Prepared:	10/01/2009 1512			Injection Volume:	

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Dibenz(a,h)anthracene	85	79	46 - 124	8	40		
Dibenzofuran	84	83	50 - 112	1	40		
1,2-Dichlorobenzene	65	65	39 - 110	1	40		
1,3-Dichlorobenzene	65	63	36 - 110	3	40		
1,4-Dichlorobenzene	62	61	38 - 110	2	40		
3,3'-Dichlorobenzidine	9	20	10 - 113	80	40	F	F
2,4-Dichlorophenol	85	75	46 - 115	12	40		
2,6-Dichlorophenol	90	82	46 - 130	10	40		
Diethyl phthalate	97	88	51 - 119	10	40		
Dimethoate	68	49	28 - 142	34	40		
7,12-Dimethylbenz(a)anthracene	70	66	39 - 130	6	40		
3,3'-Dimethylbenzidine	0	0	10 - 130	NC	40	F	F
2,4-Dimethylphenol	88	83	36 - 110	5	40		
Dimethyl phthalate	96	87	50 - 116	10	40		
Di-n-butyl phthalate	91	85	49 - 123	7	40		
1,3-Dinitrobenzene	98	102	53 - 136	4	40		
4,6-Dinitro-2-methylphenol	95	89	29 - 167	7	40		
2,4-Dinitrophenol	114	100	10 - 189	13	40		
2,4-Dinitrotoluene	91	91	49 - 128	0	40		
2,6-Dinitrotoluene	92	91	45 - 131	1	40		
Di-n-octyl phthalate	102	94	44 - 134	8	40		
Dinoseb	106	103	50 - 144	3	40		
1,4-Dioxane	38	43	11 - 110	12	40		
Disulfoton	69	67	40 - 130	3	40		
Ethyl methanesulfonate	76	72	32 - 130	5	40		
Ethyl Parathion	83	82	60 - 140	1	40		
Famphur	57	37	10 - 130	42	40		F
Fluoranthene	86	80	50 - 120	7	40		
Fluorene	90	86	50 - 115	5	40		

Calculations are performed before rounding to avoid round-off errors in calculated results.

Quality Control Results

Client: Ashland Inc.

Job Number: 680-51170-1

Matrix Spike/ Matrix Spike Duplicate Recovery Report - Batch: 680-149426

Method: 8270C

Preparation: 3520C

MS Lab Sample ID:	680-51170-1	Analysis Batch:	680-150416	Instrument ID:	GC/MS SemiVolatiles - G
Client Matrix:	Water	Prep Batch:	680-149426	Lab File ID:	g5587.d
Dilution:	1.0			Initial Weight/Volume:	1030 mL
Date Analyzed:	10/12/2009 1358			Final Weight/Volume:	1 mL
Date Prepared:	10/01/2009 1512			Injection Volume:	

MSD Lab Sample ID:	680-51170-1	Analysis Batch:	680-150416	Instrument ID:	GC/MS SemiVolatiles - G
Client Matrix:	Water	Prep Batch:	680-149426	Lab File ID:	g5588.d
Dilution:	1.0			Initial Weight/Volume:	1030 mL
Date Analyzed:	10/12/2009 1422			Final Weight/Volume:	1 mL
Date Prepared:	10/01/2009 1512			Injection Volume:	

Analyte	% Rec.		RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD				
Hexachlorobenzene	81	78	48 - 119	4	40	
Hexachlorobutadiene	73	68	40 - 110	7	40	
Hexachlorocyclopentadiene	48	49	10 - 110	1	40	
Hexachloroethane	63	62	33 - 110	2	40	
Hexachlorophene	0	0	10 - 130	NC	40	F F
Hexachloropropene	0	31	10 - 130	NC	40	F
Indeno[1,2,3-cd]pyrene	83	73	40 - 126	13	40	
Isophorone	76	75	50 - 111	2	40	
Isosafrole	97	91	37 - 130	6	40	
Methapyrilene	0	0	10 - 130	NC	40	F F
3-Methylcholanthrene	81	78	62 - 130	3	40	
Methyl methanesulfonate	15	12	10 - 130	19	40	
2-Methylnaphthalene	82	79	46 - 110	4	40	
Methyl parathion	70	59	51 - 146	16	40	
2-Methylphenol	87	78	46 - 110	10	40	
3 & 4 Methylphenol	95	135	43 - 110	34	40	
Naphthalene	74	70	41 - 110	5	40	F
1,4-Naphthoquinone	10	7	10 - 130	39	40	
1-Naphthylamine	7	5	10 - 130	41	40	F F
2-Naphthylamine	7	24	10 - 130	114	40	F F
2-Nitroaniline	83	87	45 - 122	5	40	
3-Nitroaniline	72	79	30 - 116	10	40	
4-Nitroaniline	84	90	36 - 125	7	40	
Nitrobenzene	76	77	46 - 110	0	40	
2-Nitrophenol	83	77	42 - 120	7	40	
4-Nitrophenol	104	90	30 - 122	14	40	
4-Nitroquinoline-1-oxide	17	19	10 - 151	9	40	
N-Nitro-o-toluidine	77	79	45 - 130	3	40	
N-Nitrosodiethylamine	75	79	48 - 130	5	40	

Calculations are performed before rounding to avoid round-off errors in calculated results.

Quality Control Results

Client: Ashland Inc.

Job Number: 680-51170-1

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 680-149426**

**Method: 8270C
Preparation: 3520C**

MS Lab Sample ID: 680-51170-1 Analysis Batch: 680-150416
 Client Matrix: Water Prep Batch: 680-149426
 Dilution: 1.0
 Date Analyzed: 10/12/2009 1358
 Date Prepared: 10/01/2009 1512

Instrument ID: GC/MS SemiVolatiles - G
 Lab File ID: g5587.d
 Initial Weight/Volume: 1030 mL
 Final Weight/Volume: 1 mL
 Injection Volume:

MSD Lab Sample ID: 680-51170-1 Analysis Batch: 680-150416
 Client Matrix: Water Prep Batch: 680-149426
 Dilution: 1.0
 Date Analyzed: 10/12/2009 1422
 Date Prepared: 10/01/2009 1512

Instrument ID: GC/MS SemiVolatiles - G
 Lab File ID: g5588.d
 Initial Weight/Volume: 1030 mL
 Final Weight/Volume: 1 mL
 Injection Volume:

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
N-Nitrosodimethylamine	72	69	33 - 110	4	40		
N-Nitrosodi-n-butylamine	82	79	41 - 130	4	40		
N-Nitrosodi-n-propylamine	95	91	45 - 112	5	40		
N-Nitrosodiphenylamine	91	86	47 - 119	6	40		
N-Nitrosomethylethylamine	90	90	47 - 130	0	40		
N-Nitrosomorpholine	82	82	35 - 130	0	40		
N-Nitrosopiperidine	0	85	53 - 130	NC	40	F	
N-Nitrosopyrrolidine	74	76	50 - 130	3	40		
o,o',o"-Triethylphosphorothioate	91	91	23 - 162	0	40		
p-Dimethylamino azobenzene	76	73	29 - 169	5	40		
Pentachlorobenzene	96	99	52 - 130	3	40		
Pentachloronitrobenzene	95	96	52 - 130	1	40		
Pentachlorophenol	107	65	37 - 132	48	40	F	
Phenacetin	83	95	62 - 130	14	40		
Phenanthrene	90	82	52 - 117	9	40		
Phenol	86	4	39 - 110	182	40	F	
Phorate	111	109	29 - 181	2	40		
2-Picoline	1	58	10 - 130	192	40	F	F
p-Phenylenediamine	0	0	10 - 130	NC	40	F	F
Pronamide	99	99	64 - 134	1	40		
Pyrene	84	77	52 - 125	8	40		
Pyridine	0	44	10 - 110	NC	40	F	
Safrole, Total	89	88	39 - 130	0	40		
Sulfonepp	69	70	44 - 130	1	40		
1,2,4,5-Tetrachlorobenzene	85	86	41 - 130	1	40		
2,3,4,6-Tetrachlorophenol	100	57	38 - 130	55	40	F	
Thionazin	76	73	48 - 135	4	40		
2-Toluidine	0	49	27 - 130	NC	40	F	
1,2,4-Trichlorobenzene	71	69	41 - 110	3	40		

Calculations are performed before rounding to avoid round-off errors in calculated results.

Quality Control Results

Client: Ashland Inc.

Job Number: 680-51170-1

Matrix Spike/ Matrix Spike Duplicate Recovery Report - Batch: 680-149426

Method: 8270C

Preparation: 3520C

MS Lab Sample ID:	680-51170-1	Analysis Batch:	680-150416	Instrument ID:	GC/MS SemiVolatiles - G
Client Matrix:	Water	Prep Batch:	680-149426	Lab File ID:	g5587.d
Dilution:	1.0			Initial Weight/Volume:	1030 mL
Date Analyzed:	10/12/2009 1358			Final Weight/Volume:	1 mL
Date Prepared:	10/01/2009 1512			Injection Volume:	

MSD Lab Sample ID:	680-51170-1	Analysis Batch:	680-150416	Instrument ID:	GC/MS SemiVolatiles - G
Client Matrix:	Water	Prep Batch:	680-149426	Lab File ID:	g5588.d
Dilution:	1.0			Initial Weight/Volume:	1030 mL
Date Analyzed:	10/12/2009 1422			Final Weight/Volume:	1 mL
Date Prepared:	10/01/2009 1512			Injection Volume:	

Analyte	% Rec.		RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD				
2,4,5-Trichlorophenol	93	72	47 - 122	25	40	
2,4,6-Trichlorophenol	93	80	46 - 120	15	40	
1,3,5-Trinitrobenzene	120	109	10 - 200	10	40	
Surrogate	MS % Rec		MSD % Rec		Acceptance Limits	
2,4,6-Tribromophenol	106		81		40 - 139	
2-Fluorobiphenyl	83		83		50 - 113	
2-Fluorophenol	84		74		36 - 110	
Terphenyl-d14	42		27		10 - 121	
Phenol-d5	83		72		38 - 116	
Nitrobenzene-d5	82		81		45 - 112	

Calculations are performed before rounding to avoid round-off errors in calculated results.

Quality Control Results

Client: Ashland Inc.

Job Number: 680-51170-1

Method Blank - Batch: 680-150728

Method: 8270C

Preparation: 3520C

Lab Sample ID: MB 680-150728/20-A
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 10/20/2009 1157
Date Prepared: 10/16/2009 1358

Analysis Batch: 680-151231
Prep Batch: 680-150728
Units: ug/L

Instrument ID: GC/MS SemiVolatiles - G
Lab File ID: g5630.d
Initial Weight/Volume: 1000 mL
Final Weight/Volume: 1 mL
Injection Volume:

Analyte	Result	Qual	RL
Acenaphthene	<10		10
Acenaphthylene	<10		10
Acetophenone	<10		10
2-Acetylaminofluorene	<10		10
alpha,alpha-Dimethyl phenethylamine	<2000		2000
4-Aminobiphenyl	<10		10
Aniline	<20		20
Anthracene	<10		10
Aramite, Total	<10		10
Benzo[a]anthracene	<10		10
Benzo[a]pyrene	<10		10
Benzo[b]fluoranthene	<10		10
Benzo[g,h,i]perylene	<10		10
Benzo[k]fluoranthene	<10		10
Benzyl alcohol	<10		10
1,1'-Biphenyl	<10		10
Bis(2-chloroethoxy)methane	<10		10
Bis(2-chloroethyl)ether	<10		10
bis(chloroisopropyl) ether	<10		10
Bis(2-ethylhexyl) phthalate	<10		10
4-Bromophenyl phenyl ether	<10		10
Butyl benzyl phthalate	<10		10
4-Chloroaniline	<20		20
4-Chloro-3-methylphenol	<10		10
2-Chloronaphthalene	<10		10
2-Chlorophenol	<10		10
4-Chlorophenyl phenyl ether	<10		10
Chrysene	<10		10
Diallate	<10		10
Dibenz(a,h)anthracene	<10		10
Dibenzo furan	<10		10
1,2-Dichlorobenzene	<10		10
1,3-Dichlorobenzene	<10		10
1,4-Dichlorobenzene	<10		10
3,3'-Dichlorobenzidine	<20		20
2,4-Dichlorophenol	<10		10
2,6-Dichlorophenol	<10		10
Diethyl phthalate	<10		10
Dimethoate	<10		10
7,12-Dimethylbenz(a)anthracene	<10		10
3,3'-Dimethylbenzidine	<20		20

Calculations are performed before rounding to avoid round-off errors in calculated results.

Quality Control Results

Client: Ashland Inc.

Job Number: 680-51170-1

Method Blank - Batch: 680-150728

Lab Sample ID: MB 680-150728/20-A
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 10/20/2009 1157
Date Prepared: 10/16/2009 1358

Analysis Batch: 680-151231
Prep Batch: 680-150728
Units: ug/L

Method: 8270C

Preparation: 3520C

Instrument ID: GC/MS SemiVolatiles - G
Lab File ID: g5630.d
Initial Weight/Volume: 1000 mL
Final Weight/Volume: 1 mL
Injection Volume:

Analyte	Result	Qual	RL
2,4-Dimethylphenol	<10		10
Dimethyl phthalate	<10		10
Di-n-butyl phthalate	<10		10
1,3-Dinitrobenzene	<10		10
4,6-Dinitro-2-methylphenol	<50		50
2,4-Dinitrophenol	<50		50
2,4-Dinitrotoluene	<10		10
2,6-Dinitrotoluene	<10		10
Di-n-octyl phthalate	<10		10
Dinoseb	<10		10
1,4-Dioxane	<10		10
Disulfoton	<10		10
Ethyl methanesulfonate	<10		10
Ethyl Parathion	<10		10
Famphur	<10		10
Fluoranthene	<10		10
Fluorene	<10		10
Hexachlorobenzene	<10		10
Hexachlorobutadiene	<10		10
Hexachlorocyclopentadiene	<10		10
Hexachloroethane	<10		10
Hexachlorophene	<5000		5000
Hexachloropropene	<10		10
Indeno[1,2,3-cd]pyrene	<10		10
Isophorone	<10		10
Isosafrole	<10		10
Methapyrilenes	<2000		2000
3-Methylcholanthrene	<10		10
Methyl methanesulfonate	<10		10
2-Methylnaphthalene	<10		10
Methyl parathion	<10		10
2-Methylphenol	<10		10
3 & 4 Methylphenol	<10		10
Naphthalene	<10		10
1,4-Naphthoquinone	<10		10
1-Naphthylamine	<10		10
2-Naphthylamine	<10		10
2-Nitroaniline	<50		50
3-Nitroaniline	<50		50
4-Nitroaniline	<50		50
Nitrobenzene	<10		10

Calculations are performed before rounding to avoid round-off errors in calculated results.

Quality Control Results

Client: Ashland Inc.

Job Number: 680-51170-1

Method Blank - Batch: 680-150728

Method: 8270C

Preparation: 3520C

Lab Sample ID: MB 680-150728/20-A
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 10/20/2009 1157
Date Prepared: 10/16/2009 1358

Analysis Batch: 680-151231
Prep Batch: 680-150728
Units: ug/L

Instrument ID: GC/MS SemiVolatiles - G
Lab File ID: g5630.d
Initial Weight/Volume: 1000 mL
Final Weight/Volume: 1 mL
Injection Volume:

Analyte	Result	Qual	RL
2-Nitrophenol	<10		10
4-Nitrophenol	<50		50
4-Nitroquinoline-1-oxide	<20		20
N-Nitro-o-toluidine	<10		10
N-Nitrosodiethylamine	<10		10
N-Nitrosodimethylamine	<10		10
N-Nitrosodi-n-butylamine	<10		10
N-Nitrosodi-n-propylamine	<10		10
N-Nitrosodiphenylamine	<10		10
N-Nitrosomethylethylamine	<10		10
N-Nitrosomorpholine	<10		10
N-Nitrosopiperidine	<10		10
N-Nitrosopyrrolidine	<10		10
o,o',o"-Triethylphosphorothioate	<10		10
p-Dimethylamino azobenzene	<10		10
Pentachlorobenzene	<10		10
Pentachloronitrobenzene	<10		10
Pentachlorophenol	<50		50
Phenacetin	<10		10
Phenanthere	<10		10
Phenol	<10		10
Phorate	<10		10
2-Picoline	<10		10
p-Phenylenediamine	<2000		2000
Pronamide	<10		10
Pyrene	<10		10
Pyridine	<50		50
Safrole, Total	<10		10
Sulfotep	<10		10
1,2,4,5-Tetrachlorobenzene	<10		10
2,3,4,6-Tetrachlorophenol	<10		10
Thionazin	<10		10
2-Toluidine	<10		10
1,2,4-Trichlorobenzene	<10		10
2,4,5-Trichlorophenol	<10		10
2,4,6-Trichlorophenol	<10		10
1,3,5-Trinitrobenzene	<10		10

Surrogate	% Rec	Acceptance Limits
2,4,6-Tribromophenol	72	40 - 139
2-Fluorobiphenyl	72	50 - 113

Calculations are performed before rounding to avoid round-off errors in calculated results.

Quality Control Results

Client: Ashland Inc.

Job Number: 680-51170-1

Surrogate	% Rec	Acceptance Limits
2-Fluorophenol	70	36 - 110
Terphenyl-d14	77	10 - 121
Phenol-d5	71	38 - 116
Nitrobenzene-d5	74	45 - 112

Calculations are performed before rounding to avoid round-off errors in calculated results.

Quality Control Results

Client: Ashland Inc.

Job Number: 680-51170-1

Lab Control Sample - Batch: 680-150728

Method: 8270C

Preparation: 3520C

Lab Sample ID: LCS 680-150728/21-A
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 10/20/2009 1221
Date Prepared: 10/16/2009 1358

Analysis Batch: 680-151231
Prep Batch: 680-150728
Units: ug/L

Instrument ID: GC/MS SemiVolatiles - G
Lab File ID: g5631.d
Initial Weight/Volume: 1000 mL
Final Weight/Volume: 1 mL
Injection Volume:

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Acenaphthene	100	73.9	74	45 - 117	
Acenaphthylene	100	81.5	82	51 - 112	
Acetophenone	100	72.4	72	25 - 110	
2-Acetylaminofluorene	100	86.0	86	69 - 123	
alpha,alpha-Dimethyl phenethylamine	500	<2000	21	10 - 158	
4-Aminobiphenyl	100	27.9	28	10 - 130	
Aniline	100	68.2	68	10 - 114	
Anthracene	100	83.3	83	52 - 116	
Aramite, Total	100	73.3	73	10 - 150	
Benz[a]anthracene	100	84.4	84	49 - 124	
Benz[a]pyrene	100	96.8	97	48 - 120	
Benz[b]fluoranthene	100	91.4	91	46 - 126	
Benz[g,h,i]perylene	100	85.3	85	51 - 117	
Benz[j]fluoranthene	100	83.8	84	47 - 126	
Benzyl alcohol	100	77.9	78	34 - 113	
1,1'-Biphenyl	100	75.7	76	47 - 112	
Bis(2-chloroethoxy)methane	100	106	106	50 - 112	
Bis(2-chloroethyl)ether	100	74.7	75	43 - 110	
bis(chloroisopropyl) ether	100	75.9	76	42 - 110	
Bis(2-ethylhexyl) phthalate	100	89.1	89	47 - 134	
4-Bromophenyl phenyl ether	100	83.2	83	42 - 110	
Butyl benzyl phthalate	100	92.4	92	52 - 135	
4-Chloroaniline	100	75.5	75	10 - 110	
4-Chloro-3-methylphenol	100	78.8	79	46 - 118	
2-Choronaphthalene	100	82.4	82	47 - 110	
2-Chlorophenol	100	71.9	72	47 - 110	
4-Chlorophenyl phenyl ether	100	82.2	82	46 - 114	
Chrysene	100	84.7	85	51 - 123	
Diallate	100	99.9	100	36 - 145	
Dibenzo(a,h)anthracene	100	83.7	84	46 - 124	
Dibenzofuran	100	78.5	78	50 - 112	
1,2-Dichlorobenzene	100	61.4	61	39 - 110	
1,3-Dichlorobenzene	100	59.7	60	36 - 110	
1,4-Dichlorobenzene	100	60.8	61	38 - 110	
3,3'-Dichlorobenzidine	100	72.9	73	10 - 113	
2,4-Dichlorophenol	100	73.6	74	46 - 115	
2,6-Dichlorophenol	100	82.2	82	46 - 130	
Diethyl phthalate	100	83.5	83	51 - 119	
Dimethoate	100	63.3	63	28 - 142	
7,12-Dimethylbenz(a)anthracene	100	72.3	72	39 - 130	
3,3'-Dimethylbenzidine	100	30.6	31	10 - 130	

Calculations are performed before rounding to avoid round-off errors in calculated results.

Quality Control Results

Client: Ashland Inc.

Job Number: 680-51170-1

Lab Control Sample - Batch: 680-150728

Method: 8270C

Preparation: 3520C

Lab Sample ID: LCS 680-150728/21-A
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 10/20/2009 1221
Date Prepared: 10/16/2009 1358

Analysis Batch: 680-151231
Prep Batch: 680-150728
Units: ug/L

Instrument ID: GC/MS SemiVolatiles - G
Lab File ID: g5631.d
Initial Weight/Volume: 1000 mL
Final Weight/Volume: 1 mL
Injection Volume:

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
2,4-Dimethylphenol	200	166	83	36 - 110	
Dimethyl phthalate	100	85.9	86	50 - 116	
Di-n-butyl phthalate	100	86.9	87	49 - 123	
1,3-Dinitrobenzene	100	91.3	91	53 - 136	
4,6-Dinitro-2-methylphenol	100	86.2	86	29 - 167	
2,4-Dinitrophenol	100	96.6	97	10 - 189	
2,4-Dinitrotoluene	100	80.5	81	49 - 128	
2,6-Dinitrotoluene	100	81.1	81	45 - 131	
Di-n-octyl phthalate	100	93.5	94	44 - 134	
Dinoseb	100	79.6	80	50 - 144	
1,4-Dioxane	100	43.4	43	11 - 110	
Disulfoton	100	80.8	81	40 - 130	
Ethyl methanesulfonate	100	71.0	71	32 - 130	
Ethyl Parathion	100	79.6	80	60 - 140	
Famphur	100	<10	2	10 - 130	*
Fluoranthene	100	82.4	82	50 - 120	
Fluorene	100	81.2	81	50 - 115	
Hexachlorobenzene	100	74.6	75	48 - 119	
Hexachlorobutadiene	100	65.6	66	40 - 110	
Hexachlorocyclopentadiene	100	45.1	45	10 - 110	
Hexachloroethane	100	55.6	56	33 - 110	
Hexachlorophene	500	<5000	70	10 - 130	
Hexachloropropene	100	27.3	27	10 - 130	
Indeno[1,2,3-cd]pyrene	100	82.9	83	40 - 126	
Isophorone	100	74.1	74	50 - 111	
Isosafrole	100	82.8	83	37 - 130	
Methapynilene	100	<2000	42	10 - 130	
3-Methylcholanthrene	100	79.5	79	62 - 130	
Methyl methanesulfonate	100	<10	9	10 - 130	*
2-Methylnaphthalene	100	71.4	71	46 - 110	
Methyl parathion	100	71.1	71	51 - 146	
2-Methylphenol	100	76.2	76	46 - 110	
3 & 4 Methylphenol	100	78.2	78	43 - 110	
Naphthalene	100	72.9	73	41 - 110	
1,4-Naphthoquinone	100	<10	7	10 - 130	*
1-Naphthylamine	100	<10	2	10 - 130	*
2-Naphthylamine	100	38.9	39	10 - 130	
2-Nitroaniline	100	79.3	79	45 - 122	
3-Nitroaniline	100	73.2	73	30 - 116	
4-Nitroaniline	100	72.2	72	36 - 125	
Nitrobenzene	100	73.5	74	46 - 110	

Calculations are performed before rounding to avoid round-off errors in calculated results.

Quality Control Results

Client: Ashland Inc.

Job Number: 680-51170-1

Lab Control Sample - Batch: 680-150728

Method: 8270C

Preparation: 3520C

Lab Sample ID: LCS 680-150728/21-A
 Client Matrix: Water
 Dilution: 1.0
 Date Analyzed: 10/20/2009 1221
 Date Prepared: 10/16/2009 1358

Analysis Batch: 680-151231
 Prep Batch: 680-150728
 Units: ug/L

Instrument ID: GC/MS SemiVolatiles - G
 Lab File ID: g5631.d
 Initial Weight/Volume: 1000 mL
 Final Weight/Volume: 1 mL
 Injection Volume:

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
2-Nitrophenol	100	74.4	74	42 - 120	
4-Nitrophenol	100	71.6	72	30 - 122	
4-Nitroquinoline-1-oxide	100	61.7	62	10 - 151	
N-Nitro-o-toluidine	100	77.9	78	45 - 130	
N-Nitrosodiethylamine	100	80.7	81	48 - 130	
N-Nitrosodimethylamine	100	64.3	64	33 - 110	
N-Nitrosodi-n-butylamine	100	103	103	41 - 130	
N-Nitrosodi-n-propylamine	100	84.5	85	45 - 112	
N-Nitrosodiphenylamine	100	88.7	89	47 - 119	
N-Nitrosomethylethylamine	100	95.5	96	47 - 130	
N-Nitrosomorpholine	100	89.0	89	35 - 130	
N-Nitrosopiperidine	100	86.8	87	53 - 130	
N-Nitrosopyrrolidine	100	86.2	86	50 - 130	
o,o',o"-Triethylphosphorothioate	100	145	145	23 - 162	
p-Dimethylamino azobenzene	100	85.5	85	29 - 169	
Pentachlorobenzene	100	81.3	81	52 - 130	
Pentachloronitrobenzene	100	83.4	83	52 - 130	
Pentachlorophenol	100	86.4	86	37 - 132	
Phenacetin	100	82.1	82	62 - 130	
Phenanthrene	100	83.5	84	52 - 117	
Phenol	100	71.8	72	39 - 110	
Phorate	100	70.0	70	29 - 181	
2-Picoline	100	64.8	65	10 - 130	
p-Phenylenediamine	500	<2000	15	10 - 130	
Pronamide	100	89.9	90	64 - 134	
Pyrene	100	84.9	85	52 - 125	
Pyridine	100	<50	49	10 - 110	
Safrole, Total	100	81.3	81	39 - 130	
Sulfotep	100	79.5	80	44 - 130	
1,2,4,5-Tetrachlorobenzene	100	74.8	75	41 - 130	
2,3,4,6-Tetrachlorophenol	100	79.2	79	38 - 130	
Thionazin	100	83.0	83	48 - 135	
2-Toluidine	100	59.0	59	27 - 130	
1,2,4-Trichlorobenzene	100	62.4	62	41 - 110	
2,4,5-Trichlorophenol	100	82.3	82	47 - 122	
2,4,6-Trichlorophenol	100	77.1	77	46 - 120	
1,3,5-Trinitrobenzene	100	89.4	89	10 - 200	
Surrogate		% Rec		Acceptance Limits	
2,4,6-Tribromophenol		75		40 - 139	
2-Fluorobiphenyl		78		50 - 113	

Calculations are performed before rounding to avoid round-off errors in calculated results.

Quality Control Results

Client: Ashland Inc.

Job Number: 680-51170-1

Surrogate	% Rec	Acceptance Limits
2-Fluorophenol	68	36 - 110
Terphenyl-d14	77	10 - 121
Phenol-d5	71	38 - 116
Nitrobenzene-d5	74	45 - 112

Calculations are performed before rounding to avoid round-off errors in calculated results.

Quality Control Results

Client: Ashland Inc.

Job Number: 680-51170-1

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 680-150728**

**Method: 8270C
Preparation: 3520C**

MS Lab Sample ID:	680-51170-1RE	Analysis Batch:	680-151231	Instrument ID:	GC/MS SemiVolatiles - G
Client Matrix:	Water	Prep Batch:	680-150728	Lab File ID:	g5654.d
Dilution:	1.0	Run Type:	RE	Initial Weight/Volume:	1060 mL
Date Analyzed:	10/20/2009 2149			Final Weight/Volume:	1 mL
Date Prepared:	10/16/2009 1358			Injection Volume:	

MSD Lab Sample ID:	680-51170-1RE	Analysis Batch:	680-151289	Instrument ID:	GC/MS SemiVolatiles - G
Client Matrix:	Water	Prep Batch:	680-150728	Lab File ID:	g5666.d
Dilution:	1.0	Run Type:	RE	Initial Weight/Volume:	1060 mL
Date Analyzed:	10/21/2009 1922			Final Weight/Volume:	1 mL
Date Prepared:	10/16/2009 1358			Injection Volume:	

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Acenaphthene	64	70	45 - 117	9	40	H	H
Acenaphthylene	72	75	51 - 112	5	40	H	H
Acetophenone	69	71	25 - 110	3	40	H	H
2-Acetylaminofluorene	88	89	69 - 123	1	40	H	H
alpha,alpha-Dimethyl phenethylamine	61	60	10 - 158	2	40	H E	E H
4-Aminobiphenyl	46	39	10 - 130	15	40	H	H
Aniline	59	56	10 - 114	5	40	H	H
Anthracene	70	75	52 - 116	7	40	H	H
Aramite, Total	77	74	10 - 150	4	40	H	H
Benzo[a]anthracene	68	70	49 - 124	2	40	H	H
Benzo[a]pyrene	77	79	48 - 120	3	40	H	H
Benzo[b]fluoranthene	71	70	46 - 126	1	40	H	H
Benzo[g,h,i]perylene	64	65	51 - 117	2	40	H	H
Benzo[k]fluoranthene	62	68	47 - 126	10	40	H	H
Benzyl alcohol	67	71	34 - 113	5	40	H	H
1,1'-Biphenyl	68	71	47 - 112	5	40	H	H
Bis(2-chloroethoxy)methane	101	103	50 - 112	2	40	H	H
Bis(2-chloroethyl)ether	75	74	43 - 110	2	40	H	H
bis(chloroisopropyl) ether	80	79	42 - 110	0	40	H	H
Bis(2-ethylhexyl) phthalate	68	72	47 - 134	6	40	H	H
4-Bromophenyl phenyl ether	71	77	42 - 110	9	40	H	H
Butyl benzyl phthalate	74	78	52 - 135	6	40	H	H
4-Chloroaniline	57	56	10 - 110	2	40	H	H
4-Chloro-3-methylphenol	68	75	46 - 118	9	40	H	H
2-Chloronaphthalene	74	79	47 - 110	6	40	H	H
2-Chlorophenol	68	68	47 - 110	0	40	H	H
4-Chlorophenyl phenyl ether	74	77	46 - 114	3	40	H	H
Chrysene	67	70	51 - 123	4	40	H	H
Diallate	90	95	36 - 145	6	40	H	H

Calculations are performed before rounding to avoid round-off errors in calculated results.

Quality Control Results

Client: Ashland Inc.

Job Number: 680-51170-1

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 680-150728**

**Method: 8270C
Preparation: 3520C**

MS Lab Sample ID:	680-51170-1RE	Analysis Batch:	680-151231	Instrument ID:	GC/MS SemiVolatiles - G
Client Matrix:	Water	Prep Batch:	680-150728	Lab File ID:	g5654.d
Dilution:	1.0	Run Type:	RE	Initial Weight/Volume:	1060 mL
Date Analyzed:	10/20/2009 2149			Final Weight/Volume:	1 mL
Date Prepared:	10/16/2009 1358			Injection Volume:	

MSD Lab Sample ID:	680-51170-1RE	Analysis Batch:	680-151289	Instrument ID:	GC/MS SemiVolatiles - G
Client Matrix:	Water	Prep Batch:	680-150728	Lab File ID:	g5666.d
Dilution:	1.0	Run Type:	RE	Initial Weight/Volume:	1060 mL
Date Analyzed:	10/21/2009 1922			Final Weight/Volume:	1 mL
Date Prepared:	10/16/2009 1358			Injection Volume:	

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Dibenz(a,h)anthracene	65	67	46 - 124	2	40	H	H
Dibenzofuran	70	76	50 - 112	7	40	H	H
1,2-Dichlorobenzene	59	59	39 - 110	0	40	H	H
1,3-Dichlorobenzene	56	57	36 - 110	1	40	H	H
1,4-Dichlorobenzene	59	58	38 - 110	1	40	H	H
3,3'-Dichlorobenzidine	49	32	10 - 113	42	40	H	H F
2,4-Dichlorophenol	48	72	46 - 115	39	40	H	H
2,6-Dichlorophenol	56	79	46 - 130	34	40	H	H
Diethyl phthalate	75	80	51 - 119	5	40	H	H
Dimethoate	54	60	28 - 142	11	40	H	H
7,12-Dimethylbenz(a)anthracene	56	58	39 - 130	4	40	H	H
3,3'-Dimethylbenzidine	7	1	10 - 130	145	40	H F	H F
2,4-Dimethylphenol	75	77	36 - 110	3	40	H	H
Dimethyl phthalate	76	81	50 - 116	6	40	H	H
Di-n-butyl phthalate	73	76	49 - 123	4	40	H	H
1,3-Dinitrobenzene	86	91	53 - 136	5	40	H	H
4,6-Dinitro-2-methylphenol	73	78	29 - 167	7	40	H	H
2,4-Dinitrophenol	76	81	10 - 189	6	40	H	H
2,4-Dinitrotoluene	73	78	49 - 128	7	40	H	H
2,6-Dinitrotoluene	72	77	45 - 131	7	40	H	H
Di-n-octyl phthalate	74	77	44 - 134	4	40	H	H
Dinoseb	72	75	50 - 144	4	40	H	H
1,4-Dioxane	59	50	11 - 110	17	40	H	H
Disulfoton	71	73	40 - 130	3	40	H	H
Ethyl methanesulfonate	67	74	32 - 130	11	40	H	H
Ethyl Parathion	74	77	60 - 140	3	40	H	H
Famphur	17	50	10 - 130	96	40	H	H F
Fluoranthene	70	72	50 - 120	3	40	H	H
Fluorene	73	77	50 - 115	6	40	H	H

Calculations are performed before rounding to avoid round-off errors in calculated results.

Quality Control Results

Job Number: 680-51170-1

Client: Ashland Inc.

Matrix Spike/ Matrix Spike Duplicate Recovery Report - Batch: 680-150728

**Method: 8270C
Preparation: 3520C**

MS Lab Sample ID:	680-51170-1RE	Analysis Batch:	680-151231	Instrument ID:	GC/MS SemiVolatiles - G
Client Matrix:	Water	Prep Batch:	680-150728	Lab File ID:	g5654.d
Dilution:	1.0	Run Type:	RE	Initial Weight/Volume:	1060 mL
Date Analyzed:	10/20/2009 2149			Final Weight/Volume:	1 mL
Date Prepared:	10/16/2009 1358			Injection Volume:	
MSD Lab Sample ID:	680-51170-1RE	Analysis Batch:	680-151289	Instrument ID:	GC/MS SemiVolatiles - G
Client Matrix:	Water	Prep Batch:	680-150728	Lab File ID:	g5666.d
Dilution:	1.0	Run Type:	RE	Initial Weight/Volume:	1060 mL
Date Analyzed:	10/21/2009 1922			Final Weight/Volume:	1 mL
Date Prepared:	10/16/2009 1358			Injection Volume:	

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Hexachlorobenzene	63	64	48 - 119	3	40	H	H
Hexachlorobutadiene	62	63	40 - 110	2	40	H	H
Hexachlorocyclopentadiene	44	45	10 - 110	1	40	H	H
Hexachloroethane	54	57	33 - 110	4	40	H	H
Hexachlorophene	0	9	10 - 130	NC	40	HF	HF
Hexachloropropene	26	28	10 - 130	6	40	H	H
Indeno[1,2,3-cd]pyrene	67	66	40 - 126	1	40	H	H
Isophorone	69	72	50 - 111	4	40	H	H
Isosafrole	87	86	37 - 130	2	40	H	H
Methapyrilene	32	0	10 - 130	NC	40	H	HF
3-Methylcholanthrene	67	65	62 - 130	3	40	H	H
Methyl methanesulfonate	8	8	10 - 130	1	40	HF	HF
2-Methylnaphthalene	70	71	46 - 110	2	40	H	H
Methyl parathion	62	73	51 - 146	16	40	H	H
2-Methylphenol	71	70	46 - 110	2	40	H	H
3 & 4 Methylphenol	67	71	43 - 110	6	40	H	H
Naphthalene	89	97	41 - 110	8	40	H	H
1,4-Naphthoquinone	10	14	10 - 130	28	40	H	H
1-Naphthylamine	4	0	10 - 130	NC	40	HF	HF
2-Naphthylamine	32	26	10 - 130	19	40	H	H
2-Nitroaniline	72	79	45 - 122	9	40	H	H
3-Nitroaniline	64	70	30 - 116	9	40	H	H
4-Nitroaniline	70	76	36 - 125	8	40	H	H
Nitrobenzene	69	72	46 - 110	5	40	H	H
2-Nitrophenol	69	72	42 - 120	4	40	H	H
4-Nitrophenol	73	75	30 - 122	4	40	H	H
4-Nitroquinoline-1-oxide	25	54	10 - 151	73	40	H	HF
N-Nitro-o-toluidine	67	71	45 - 130	6	40	H	H
N-Nitrosodiethylamine	82	80	48 - 130	3	40	H	H

Calculations are performed before rounding to avoid round-off errors in calculated results.

Quality Control Results

Client: Ashland Inc.

Job Number: 680-51170-1

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 680-150728**

**Method: 8270C
Preparation: 3520C**

MS Lab Sample ID:	680-51170-1RE	Analysis Batch:	680-151231	Instrument ID:	GC/MS SemiVolatiles - G
Client Matrix:	Water	Prep Batch:	680-150728	Lab File ID:	g5654.d
Dilution:	1.0	Run Type:	RE	Initial Weight/Volume:	1060 mL
Date Analyzed:	10/20/2009 2149			Final Weight/Volume:	1 mL
Date Prepared:	10/16/2009 1358			Injection Volume:	

MSD Lab Sample ID:	680-51170-1RE	Analysis Batch:	680-151289	Instrument ID:	GC/MS SemiVolatiles - G
Client Matrix:	Water	Prep Batch:	680-150728	Lab File ID:	g5666.d
Dilution:	1.0	Run Type:	RE	Initial Weight/Volume:	1060 mL
Date Analyzed:	10/21/2009 1922			Final Weight/Volume:	1 mL
Date Prepared:	10/16/2009 1358			Injection Volume:	

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
N-Nitrosodimethylamine	74	74	33 - 110	0	40	H	H
N-Nitrosodi-n-butylamine	108	110	41 - 130	1	40	H	H
N-Nitrosodi-n-propylamine	80	81	45 - 112	1	40	H	H
N-Nitrosodiphenylamine	76	80	47 - 119	5	40	H	H
N-Nitrosomethylethyldamine	96	96	47 - 130	1	40	H	H
N-Nitrosomorpholine	94	94	35 - 130	0	40	H	H
N-Nitrosopiperidine	84	86	53 - 130	2	40	H	H
N-Nitrosopyrrolidine	83	86	50 - 130	3	40	H	H
o,o',o"-Triethylphosphorothioate	140	143	23 - 162	2	40	H	H
p-Dimethylamino azobenzene	72	75	29 - 169	5	40	H	H
Pentachlorobenzene	78	81	52 - 130	3	40	H	H
Pentachloronitrobenzene	80	82	52 - 130	2	40	H	H
Pentachlorophenol	64	65	37 - 132	2	40	H	H
Phenacetin	83	86	62 - 130	3	40	H	H
Phenanthrene	73	77	52 - 117	5	40	H	H
Phenol	78	78	39 - 110	1	40	H	H
Phorate	102	47	29 - 181	74	40	H	H F
2-Picoline	66	63	10 - 130	4	40	H	H
p-Phenylenediamine	0	0	10 - 130	NC	40	H F	H F
Pronamide	84	87	64 - 134	3	40	H	H
Pyrene	69	74	52 - 125	6	40	H	H
Pyridine	52	47	10 - 110	9	40	H	H
Safrole, Total	83	82	39 - 130	0	40	H	H
Sulfotep	70	75	44 - 130	7	40	H	H
1,2,4,5-Tetrachlorobenzene	72	74	41 - 130	2	40	H	H
2,3,4,6-Tetrachlorophenol	53	59	38 - 130	10	40	H	H
Thionazin	75	81	48 - 135	7	40	H	H
2-Toluidine	52	52	27 - 130	2	40	H	H
1,2,4-Trichlorobenzene	62	63	41 - 110	2	40	H	H

Calculations are performed before rounding to avoid round-off errors in calculated results.

Quality Control Results

Client: Ashland Inc.

Job Number: 680-51170-1

Matrix Spike/ Matrix Spike Duplicate Recovery Report - Batch: 680-150728

Method: 8270C
Preparation: 3520C

MS Lab Sample ID: 680-51170-1RE Analysis Batch: 680-151231
Client Matrix: Water Prep Batch: 680-150728
Dilution: 1.0 Run Type: RE
Date Analyzed: 10/20/2009 2149
Date Prepared: 10/16/2009 1358

Instrument ID: GC/MS SemiVolatiles - G
Lab File ID: g5654.d
Initial Weight/Volume: 1060 mL
Final Weight/Volume: 1 mL
Injection Volume:

MSD Lab Sample ID: 680-51170-1RE Analysis Batch: 680-151289
Client Matrix: Water Prep Batch: 680-150728
Dilution: 1.0 Run Type: RE
Date Analyzed: 10/21/2009 1922
Date Prepared: 10/16/2009 1358

Instrument ID: GC/MS SemiVolatiles - G
Lab File ID: g5666.d
Initial Weight/Volume: 1060 mL
Final Weight/Volume: 1 mL
Injection Volume:

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
2,4,5-Trichlorophenol	56	74	47 - 122	26	40	H	H
2,4,6-Trichlorophenol	57	73	46 - 120	26	40	H	H
1,3,5-Trinitrobenzene	92	95	10 - 200	3	40	H	H
Surrogate	MS % Rec		MSD % Rec		Acceptance Limits		
2,4,6-Tribromophenol	67		70		40 - 139		
2-Fluorobiphenyl	71		74		50 - 113		
2-Fluorophenol	65		65		36 - 110		
Terphenyl-d14	30		31		10 - 121		
Phenol-d5	66		66		38 - 116		
Nitrobenzene-d5	71		74		45 - 112		

Calculations are performed before rounding to avoid round-off errors in calculated results.

Quality Control Results

Client: Ashland Inc.

Job Number: 680-51170-1

Method Blank - Batch: 680-149433

Method: 8081A_8082

Preparation: 3520C

Lab Sample ID: MB 680-149433/10-A
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 10/05/2009 1707
Date Prepared: 10/01/2009 1512

Analysis Batch: 680-149832
Prep Batch: 680-149433
Units: ug/L

Instrument ID: GC SemiVolatiles - M
Lab File ID: mj05013.d
Initial Weight/Volume: 1000 mL
Final Weight/Volume: 10 mL
Injection Volume: 1.0 uL
Column ID: PRIMARY

Analyte	Result	Qual	RL
PCB-1016	<1.0		1.0
PCB-1221	<2.0		2.0
PCB-1232	<1.0		1.0
PCB-1242	<1.0		1.0
PCB-1248	<1.0		1.0
PCB-1254	<1.0		1.0
PCB-1260	<1.0		1.0
Chlorobenzilate	<0.50		0.50
Isodrin	<0.050		0.050
Kepone	<1.0		1.0
4,4'-DDD	<0.10		0.10
4,4'-DDE	<0.10		0.10
4,4'-DDT	<0.10		0.10
Aldrin	<0.050		0.050
alpha-BHC	<0.050		0.050
beta-BHC	<0.050		0.050
Chlordane (technical)	<0.50		0.50
delta-BHC	<0.050		0.050
Dieldrin	<0.10		0.10
Endosulfan I	<0.050		0.050
Endosulfan II	<0.10		0.10
Endosulfan sulfate	<0.10		0.10
Endrin	<0.10		0.10
Endrin aldehyde	<0.10		0.10
Endrin ketone	<0.10		0.10
gamma-BHC (Lindane)	<0.050		0.050
Heptachlor	<0.050		0.050
Heptachlor epoxide	<0.050		0.050
Methoxychlor	<0.50		0.50
Toxaphene	<5.0		5.0

Surrogate	% Rec	Acceptance Limits
DCB Decachlorobiphenyl	76	14 - 115
Tetrachloro-m-xylene	82	35 - 120

Calculations are performed before rounding to avoid round-off errors in calculated results.

Quality Control Results

Client: Ashland Inc.

Job Number: 680-51170-1

Lab Control Sample - Batch: 680-149433

Method: 8081A_8082

Preparation: 3520C

Lab Sample ID:	LCS 680-149433/11-A	Analysis Batch:	680-149832	Instrument ID:	GC SemiVolatiles - M
Client Matrix:	Water	Prep Batch:	680-149433	Lab File ID:	mj05014.d
Dilution:	1.0	Units:	ug/L	Initial Weight/Volume:	1000 mL
Date Analyzed:	10/05/2009 1726			Final Weight/Volume:	10 mL
Date Prepared:	10/01/2009 1512			Injection Volume:	1.0 uL
				Column ID:	PRIMARY

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
4,4'-DDD	0.200	0.150	75	37 - 179	
4,4'-DDE	0.200	0.145	72	33 - 142	
4,4'-DDT	0.200	0.194	97	27 - 141	
Aldrin	0.100	0.0799	80	32 - 114	
alpha-BHC	0.100	0.0732	73	29 - 112	
beta-BHC	0.100	0.0866	87	15 - 204	
delta-BHC	0.100	0.0790	79	25 - 123	
Dieldrin	0.200	0.183	92	45 - 137	
Endosulfan I	0.100	0.0846	85	31 - 134	
Endosulfan II	0.200	0.156	78	24 - 144	
Endosulfan sulfate	0.200	0.165	83	44 - 128	
Endrin	0.200	0.167	83	38 - 144	
Endrin aldehyde	0.201	0.182	91	37 - 135	
Endrin ketone	0.200	0.174	87	41 - 155	
gamma-BHC (Lindane)	0.100	0.0794	79	31 - 118	
Heptachlor	0.100	0.0840	84	30 - 133	
Heptachlor epoxide	0.100	0.0896	90	34 - 126	
Methoxychlor	0.201	<0.50	101	10 - 243	
Surrogate		% Rec		Acceptance Limits	
DCB Decachlorobiphenyl		66		14 - 115	
Tetrachloro-m-xylene		77		35 - 120	

Lab Control Sample - Batch: 680-149433

Method: 8081A_8082

Preparation: 3520C

Lab Sample ID:	LCS 680-149433/14-A	Analysis Batch:	680-149832	Instrument ID:	GC SemiVolatiles - M
Client Matrix:	Water	Prep Batch:	680-149433	Lab File ID:	mj05015.d
Dilution:	1.0	Units:	ug/L	Initial Weight/Volume:	1000 mL
Date Analyzed:	10/05/2009 1746			Final Weight/Volume:	10 mL
Date Prepared:	10/01/2009 1512			Injection Volume:	1.0 uL
				Column ID:	PRIMARY

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
PCB-1016	10.0	7.61	76	57 - 124	
PCB-1260	10.0	8.09	81	58 - 124	
Surrogate		% Rec		Acceptance Limits	

Calculations are performed before rounding to avoid round-off errors in calculated results.

Quality Control Results

Client: Ashland Inc.

Job Number: 680-51170-1

Surrogate	% Rec	Acceptance Limits
DCB Decachlorobiphenyl	84	14 - 115
Tetrachloro-m-xylene	68	35 - 120

Matrix Spike - Batch: 680-149433

Method: 8081A_8082

Preparation: 3520C

Lab Sample ID: 680-51170-1 Analysis Batch: 680-149832 Instrument ID: GC SemiVolatiles - M
Client Matrix: Water Prep Batch: 680-149433 Lab File ID: mj05027.d
Dilution: 1.0 Units: ug/L Initial Weight/Volume: 1050 mL
Date Analyzed: 10/05/2009 2139 Final Weight/Volume: 10 mL
Date Prepared: 10/01/2009 1512 Injection Volume: 1.0 uL
Column ID: PRIMARY

Analyte	Sample Result/Qual	Spike Amount	Result	% Rec.	Limit	Qual
Heptachlor epoxide	<0.047	0.0952	0.0670	70	34 - 126	
Methoxychlor	<0.47	0.191	<0.48	85	10 - 243	

Calculations are performed before rounding to avoid round-off errors in calculated results.

Quality Control Results

Client: Ashland Inc.

Job Number: 680-51170-1

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 680-149433**

Method: 8081A_8082

Preparation: 3520C

MS Lab Sample ID: 680-51170-1 Analysis Batch: 680-149832
 Client Matrix: Water Prep Batch: 680-149433
 Dilution: 1.0
 Date Analyzed: 10/05/2009 2139
 Date Prepared: 10/01/2009 1512

Instrument ID: GC SemiVolatiles - M
 Lab File ID: mj05027.d
 Initial Weight/Volume: 1050 mL
 Final Weight/Volume: 10 mL
 Injection Volume: 1.0 uL
 Column ID: PRIMARY

MSD Lab Sample ID: 680-51170-1 Analysis Batch: 680-149832
 Client Matrix: Water Prep Batch: 680-149433
 Dilution: 1.0
 Date Analyzed: 10/05/2009 2158
 Date Prepared: 10/01/2009 1512

Instrument ID: GC SemiVolatiles - M
 Lab File ID: mj05028.d
 Initial Weight/Volume: 1050 mL
 Final Weight/Volume: 10 mL
 Injection Volume: 1.0 uL
 Column ID: PRIMARY

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
4,4'-DDD	65	66	37 - 179	0	40		
4,4'-DDE	74	77	33 - 142	5	40		
4,4'-DDT	85	87	27 - 141	2	40		
Aldrin	76	89	32 - 114	16	40		
alpha-BHC	78	88	29 - 112	12	40		
beta-BHC	79	91	15 - 204	14	40		
delta-BHC	78	80	25 - 123	2	40		
Dieldrin	74	76	45 - 137	3	40		
Endosulfan I	69	70	31 - 134	3	40		
Endosulfan II	63	63	24 - 144	0	40		
Endosulfan sulfate	66	66	44 - 128	1	40		
Endrin	73	75	38 - 144	3	40		
Endrin aldehyde	62	66	37 - 135	6	40		
Endrin ketone	71	70	41 - 155	1	40		
gamma-BHC (Lindane)	71	80	31 - 118	12	40		
Heptachlor	65	72	30 - 133	10	40		
Surrogate	MS % Rec		MSD % Rec		Acceptance Limits		
DCB Decachlorobiphenyl	21		17		14 - 115		
Tetrachloro-m-xylene	53		65		35 - 120		

Calculations are performed before rounding to avoid round-off errors in calculated results.

Quality Control Results

Client: Ashland Inc.

Job Number: 680-51170-1

Method Blank - Batch: 680-149455

Method: 6010B

Preparation: 3010A

Lab Sample ID: MB 680-149455/8-A

Analysis Batch: 680-149607

Instrument ID: ICP/AES - D

Client Matrix: Water

Prep Batch: 680-149455

Lab File ID: N/A

Dilution: 1.0

Units: ug/L

Initial Weight/Volume: 50 mL

Date Analyzed: 10/02/2009 1923

Final Weight/Volume: 50 mL

Date Prepared: 10/01/2009 1232

Analyte

Result

Qual

RL

Arsenic

<20

20

Barium

<10

10

Cadmium

<5.0

5.0

Chromium

<10

10

Lead

<10

10

Selenium

<20

20

Silver

<10

10

Lab Control Sample - Batch: 680-149455

Method: 6010B

Preparation: 3010A

Lab Sample ID: LCS 680-149455/9-A

Analysis Batch: 680-149607

Instrument ID: ICP/AES - D

Client Matrix: Water

Prep Batch: 680-149455

Lab File ID: N/A

Dilution: 1.0

Units: ug/L

Initial Weight/Volume: 50 mL

Date Analyzed: 10/02/2009 1928

Final Weight/Volume: 50 mL

Date Prepared: 10/01/2009 1232

Analyte

Spike Amount

Result

% Rec.

Limit

Qual

Arsenic

2000

1980

99

75 - 125

Barium

2000

2090

104

75 - 125

Cadmium

50.0

50.9

102

75 - 125

Chromium

200

204

102

75 - 125

Lead

500

499

100

75 - 125

Selenium

2000

1970

98

75 - 125

Silver

50.0

50.5

101

75 - 125

Calculations are performed before rounding to avoid round-off errors in calculated results.

Quality Control Results

Client: Ashland Inc.

Job Number: 680-51170-1

Matrix Spike/ Matrix Spike Duplicate Recovery Report - Batch: 680-149455

Method: 6010B

Preparation: 3010A

MS Lab Sample ID: 680-51170-1 Analysis Batch: 680-149607
Client Matrix: Water Prep Batch: 680-149455
Dilution: 1.0
Date Analyzed: 10/02/2009 1949
Date Prepared: 10/01/2009 1232

Instrument ID: ICP/AES - D
Lab File ID: N/A
Initial Weight/Volume: 50 mL
Final Weight/Volume: 50 mL

MSD Lab Sample ID: 680-51170-1 Analysis Batch: 680-149607
Client Matrix: Water Prep Batch: 680-149455
Dilution: 1.0
Date Analyzed: 10/02/2009 1954
Date Prepared: 10/01/2009 1232

Instrument ID: ICP/AES - D
Lab File ID: N/A
Initial Weight/Volume: 50 mL
Final Weight/Volume: 50 mL

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Arsenic	98	101	75 - 125	3	20		
Barium	101	105	75 - 125	3	20		
Cadmium	99	102	75 - 125	3	20		
Chromium	99	103	75 - 125	3	20		
Lead	96	100	75 - 125	3	20		
Selenium	97	100	75 - 125	3	20		
Silver	99	103	75 - 125	4	20		

Calculations are performed before rounding to avoid round-off errors in calculated results.

Quality Control Results

Client: Ashland Inc.

Job Number: 680-51170-1

Method Blank - Batch: 680-149436

Method: 7470A

Preparation: 7470A

Lab Sample ID: MB 680-149436/15-A
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 10/06/2009 1849
Date Prepared: 10/01/2009 1108

Analysis Batch: 680-149950
Prep Batch: 680-149436
Units: ug/L

Instrument ID: LEEMAN1
Lab File ID: N/A
Initial Weight/Volume: 50 mL
Final Weight/Volume: 50 mL

Analyte	Result	Qual	RL
Mercury	<0.20		0.20

Lab Control Sample - Batch: 680-149436

Method: 7470A

Preparation: 7470A

Lab Sample ID: LCS 680-149436/16-A
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 10/06/2009 1852
Date Prepared: 10/01/2009 1108

Analysis Batch: 680-149950
Prep Batch: 680-149436
Units: ug/L

Instrument ID: LEEMAN1
Lab File ID: N/A
Initial Weight/Volume: 50 mL
Final Weight/Volume: 50 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Mercury	2.50	2.42	97	80 - 120	

Matrix Spike/

Matrix Spike Duplicate Recovery Report - Batch: 680-149436

Method: 7470A

Preparation: 7470A

MS Lab Sample ID: 680-51170-1
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 10/06/2009 1859
Date Prepared: 10/01/2009 1108

Analysis Batch: 680-149950
Prep Batch: 680-149436

Instrument ID: LEEMAN1
Lab File ID: N/A
Initial Weight/Volume: 50 mL
Final Weight/Volume: 50 mL

MSD Lab Sample ID:	Analysis Batch:	Instrument ID:
Client Matrix:	Prep Batch:	Lab File ID:
Dilution:		Initial Weight/Volume:
Date Analyzed:		Final Weight/Volume:
Date Prepared:		

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Mercury	91	92	80 - 120	0	20		

Calculations are performed before rounding to avoid round-off errors in calculated results.

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

Serial Number 020301

PROJECT REFERENCE Hercules I. B.		PROJECT NO. HER	PROJECT LOCATION (STATE) MS	MATRIX TYPE CONTRACT NO.	REQUIRED ANALYSIS		PAGE 1 OF 1
TAI(LAB) PROJECT MANAGER Linda Smith	PO. NUMBER 111111111111111111	CLIENT PHONE 251-348700	CLIENT FAX 342-0040	STANDARD REPORT DELIVERY DATE DUE _____	EXPEDITED REPORT DELIVERY (SURCHARGE) DATE DUE _____	NUMBER OF COOLERS SUBMITTED PER SHIPMENT: 5	
CLIENT SITE PM Chris Waters	CLIENT E-MAIL chris.waters@ecosystemsinc.com	COMPONENTS (G) OR GRADE (G) INDICATE AQUEOUS WATER		NONAQUEOUS LIQUID (OIL, SOLVENT, ...)			
CLIENT NAME Eco-Systems (ESI)	CLIENT ADDRESS 275 N. University Blvd. #270 Mobile, AL	SOLID OR SEMISOLID		AIR			
COMPANY CONTRACTING THIS WORK (if applicable)	36608	SAMPLE IDENTIFICATION		NUMBER OF CONTAINERS SUBMITTED		REMARKS	
DATE 9/28/09	TIME 16:05	MW-24		1	3	2	
137 of 137		16:05	MS	1	3	2	
		16:05	MSD	1	3	2	
		17:45	RB	1	3	2	
		07:20	MW-20	1	3	2	
		08:23	MW-22	1	3	2	
		09:45	MW-23	1	3	2	
		11:42	MW-21	1	3	2	
		NA	TriP Blank	6			
RELINQUISHED BY: (SIGNATURE) John Klemm		DATE 9-14-09	TIME 0853	RELINQUISHED BY: (SIGNATURE) John Klemm	DATE 9-14-09	TIME 0853	TIME 0853
RECEIVED BY: (SIGNATURE) John Klemm		DATE 9/30/09	TIME 0853	RECEIVED BY: (SIGNATURE) John Klemm	DATE 9/30/09	TIME 0853	TIME 0853
RECEIVED FOR LABORATORY BY: John Klemm		DATE 9/30/09	TIME 0853	CUSTODY INTACT YES O	CUSTODY SEAL NO. 680-51170	SAVANNAH LOG NO. 3.1/4.5/5.1/5.3/4.8	LABORATORY REMARKS
Note: C.O.C. is in cooler w/ 376622 Crshd, but 376622 → 376622							

TAL8240-880 (12/07)

Login Sample Receipt Check List

Client: Ashland Inc.

Job Number: 680-51170-1

Login Number: 51170
Creator: Conner, Keaton
List Number: 1

List Source: TestAmerica Savannah

Question	T / F / NA	Comment
Radioactivity either was not measured or, if measured, is at or below background	N/A	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	5 coolers rec'd on ice
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	3.1, 4.5, 5.1, 5.3, 4.8 C
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	False	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	N/A	
Samples do not require splitting or compositing.	N/A	
Is the Field Sampler's name present on COC?	False	
Sample Preservation Verified	True	

BONNER ANALYTICAL TESTING COMPANY
QUANTITATIVE RESULTS AND QUALITY ASSURANCE DATA
DIOXIN/DIOXIN DIOCHLORO-DIOXIN BY HPLC ANALYSIS DATA

Client: Hercules Incorporated		Collected: 9/22/2009	1505	Chek	Sample Type: Water		
Sample ID: 0072		Extracted: 09/26/2009	100	DGA	Extraction Method: SW846, 3510C		
File #: 609350-01		Analyzed: 09/26/2009	0458	DGA	Analysis Method: Modified SW846		
09/09/2009-02							
COMPOUNDS	SAMPLE	METHOD BLANK	Lab Control Spikes	MATRIX SPIKE	MATRIX SPIKE DUPLICATE		
		Spikes	Spikes	Spikes	Spikes	Spikes	Spikes
	POL. ug/L (ppb)	Amount ug/L (ppb)	Detected Amount ug/L (ppb)	Detected Amount ug/L (ppb)	Detected Amount ug/L (ppb)	Detected Amount ug/L (ppb)	Detected Amount ug/L (ppb)
		% Recovery	% Recovery	% Recovery	% Recovery	% Recovery	% Recovery
Dioxin	0.000	ND	ND	8.50	10.0	10.91	10.0
Dioxin (d5)	0.000	ND	ND	8.33	10.0	8.3	10.0
Dioxin (tris)	0.000	ND	ND	8.49	10.0	8.5	10.0
SUBSTANDE COMPOUNDS		Spikes Amounts	Spikes Amounts	Spikes Amounts	Spikes Amounts	Spikes Amounts	Spikes Amounts
Naphthalene	5.4	10.00	54	4.92	10.00	49	6.67

*ND: Not detected or reported to detection leading to low recoveries.
Several samples had recoveries leading to high sample recoveries.

ell.S. Bonner
Certified by:
Michael S. Bonner, P.E.
BONNER ANALYTICAL TESTING COMPANY

BONNER ANALYTICAL TESTING COMPANY
QUANTITATIVE RESULTS AND QUALITY ASSURANCE DATA
DIOXIN/DIOXINETECH HPLC ANALYSIS DATA

COMPOUNDS	SAMPLE			METHOD BLANK			LIA CONTROL			MATRIX SPINE			MATRIX SPINE DUPLICATE			
	Detectd PPQ, ug/L (ppm)	Amount ug/L	% Recovery	Detectd Space	Amount ug/ml (ppm)	% Recovery	Detectd Space	Amount ug/ml (ppm)	% Recovery	Detectd Space	Amount ug/ml (ppm)	% Recovery	Detectd Space	Amount ug/ml (ppm)	% Recovery	
Dioxin	0.400	ND		ND	ND		8.50	10.0	85	10.31	10.0	109	7.41	10.0	74	
Dioxin (cis)	0.400	ND		ND	ND		8.33	10.0	83	8.26	10.0	83	5.36	10.0	54	
Dioxin (trans)	0.400	ND		ND	ND		8.49	10.0	85	6.94	10.0	69	5.60	10.0	57	
SURROGATE COMPOUNDS				Detectd Spiked Amount, ug/ml	Spiked Amount, ug/ml	% Recovery	Detectd Space	Spiked Amount, ug/ml	% Recovery	Detectd Space	Spiked Amount, ug/ml	% Recovery	Detectd Space	Spiked Amount, ug/ml	% Recovery	
Naphthalene		5.9	10.00	59	4.92	10.00	49	6.67	10.00	67	6.19	10.00	62	5.36	10.00	54

^aDOD was almost evaporated to dryness leading to low recoveries.
Several samples had recoveries leading to high surrogates recoveries.

M.S. Bonner

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QUANTITATIVE RESULTS AND QUALITY ASSURANCE DATA
DIAZOTATION/DIAGMETHYLATION/HPLC ANALYSIS DATA

Client: Hercules Incorporated		Collection: 10/27/2009 1005 Client:		Sample Type: Water		Extraction Method: SW44 3510C	
Sample ID: MH-20		Extraction: 10/05/2009 1030 DGA		Analyte Method: Modified SW446			
File #: 0509350-02		Analyst: 0419 DGA		0509350-02		0509350-03*	
COMPOUNDS							
	PQ, ug/L (ppb)	Detectd Amount ug/L (ppb)	Spiked Amount ug/L (ppb)	Detectd Amount ug/L (ppb)	Spiked Amount ug/L (ppb)	Detectd Amount ug/L (ppb)	MATRIX SPIKE DUPLICATE Spikes
			% Recovery			% Recovery	
Diazotization	0.400	ND		8.50	10.0	85	Detectd Amount ug/mL
Diazotization (cts)	0.400	ND		8.33	10.0	83	Spiked Amount ug/mL
Diazotization (rms)	0.400	ND		8.49	10.0	85	% Recovery
SUBSTEGATE COMPOUNDOS		Detectd Amount ug/L (ppb)	Spiked Amount ug/L (ppb)	Detectd Amount ug/L (ppb)	Spiked Amount ug/L (ppb)	Detectd Amount ug/L (ppb)	
Naphthalene	4.9	10.00	49	4.92	10.00	49	% Recovery
				6.67	10.00	67	Detectd Amount ug/mL
						6.19	Spiked Amount ug/mL
						10.00	% Recovery
						62	Detectd Amount ug/mL
						5.36	Spiked Amount ug/mL
						10.20	% Recovery

*ND = Not detected to detection limit due to low sample recoveries.
Several samples had recoveries ranging from 50% to 100%.

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QUANTITATIVE RESULTS AND QUALITY ASSURANCE DATA
DOCUMENTATION/不知道/不知何意/HAC ANALYSIS DATA

Client: Hercules Incorporated		Sample ID: MW-22		Client:		Sample Type: Water		Extraction Method: SW846 3510C		Analysis Method: Modified SW846						
				Collector:	91012000	1055										
				Extractor:	101012002	1050										
				Analyst:	101012002	0139										
COMPOUNDS	PQL ugL (ppb)	SAMPLE Size	Diluted Amount ugL (ppb)	% Recovery	METHOD BLANK Size	Diluted Amount ugL (ppb)	% Recovery	LSD Control Spiked Amount ugL (ppb)	Diluted Amount ugL (ppb)	% Recovery	LSD Control Spiked Amount ugL (ppb)					
Dibenzothiophene	0.400	ND	ND		ND	ND		6.50	10.0	65	10.91	10.0	105	7.41	10.0	74
Dibenzothiophene (cis)	0.400	ND	ND		ND	ND		8.33	10.0	83	8.28	10.0	83	5.36	10.0	54
Dibenzothiophene (trans)	0.400	ND	ND		ND	ND		8.49	10.0	85	6.94	10.0	69	5.68	10.0	57
SURrogate Compounds																
Naphthalene	8.0	10.00	80	4.92	10.00	49	6.67	10.00	67	6.19	10.00	62	5.36	10.00	54	

*ND was almost equivalent to detection leading to low recoveries.
 Several samples had interferences leading to high surrogate recoveries.

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QUANTITATIVE RESULTS AND QUALITY ASSURANCE DATA
DIAZOTIZATION DISUBSTITUTED HPLC ANALYSIS DATA

COMPOUNDS	SAMPLE			METHOD BLANK			LAB CONTROL			MATRICE SPHERE			MATRICE SPHERE DUPLICATE			
	PCP, ug/L (ppb)	Detectd Amount ug/L (ppb)	% Recovery	Spiked Amount ug/L	Detectd Amount ug/L (ppb)	% Recovery	Spiked Amount ug/mL	Detectd Amount ug/mL (ppm)	% Recovery	Spiked Amount ug/mL	Detectd Amount ug/mL (ppm)	% Recovery	Spiked Amount ug/mL	Detectd Amount ug/mL (ppm)	% Recovery	
Diazotization	0.400	1.32		ND	ND		8.50	10.0	85	10.51	10.0	109	7.41	10.0	74	
Diazotization (ds)	0.400	17.6		ND	ND		6.33	10.0	63	6.20	10.0	63	5.36	10.0	54	
Diazotization (trs)	0.400	20.6		ND	ND		8.49	10.0	85	6.94	10.0	69	5.68	10.0	57	
SUBSTOIC COMPOUNDS																
Naphthalimide		25.7	10.00	257	4.92	10.00	49	6.67	10.00	67	6.19	10.00	62	5.36	10.00	54

*HSD was almost evaporated to dryness leading to low recoveries.
Several samples had interferences leading to high sample recoveries.

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QUANTITATIVE RESULTS AND QUALITY ASSURANCE DATA
DISMUTATION/ DISMUTATION/HPLC ANALYSIS DATA

Client: Hercules Incorporated		Collection: 1/22/2000 1055 Client:		Sample Type: Water Extraction Method: SW46 3610C Analysis Method: Modified SW466	
Sample ID:	1055-0009	Extraction:	1055-0009	Client ID:	1055-0009
Re #: 00029369		Analysis:	Q35	Analyst:	Q35
080930-02					
COMPOUNDS	PQL ug/ml (ppb)	SAMPLE Spikes	METHOD BLANK Spikes	Lab Control Spikes	MATRIX SPIKE Spikes
	Detectable Amount ug/ml (ppb)	Amount ug/ml (ppb)	Detectable Amount ug/ml (ppb)	Amount ug/ml (ppb)	Detectable Amount ug/ml (ppb)
Dismutation	0.400	202	ND	8.50	10.0
Dismutation (cs)	0.400	21.1	ND	8.33	10.0
Dismutation (nmr)	0.400	19.4	ND	8.49	10.0
SURROGATE COMPOUND	Detectable Amount ug/ml (ppb)	Spikes %	Detectable Amount ug/ml (ppb)	Spikes %	Detectable Amount ug/ml (ppb)
Naphthalene	26.9	10.00	269	4.92	10.00

*ND = was almost impossible to discern leading to low recoveries.
 Several samples had interferences leading to high surrogate recoveries.

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QUANTITATIVE RESULTS AND QUALITY ASSURANCE DATA
EXTRACTION/DECONAULTURE/HPLC ANALYSIS DATA

Client: Hercules Incorporated		Client: 1065		Sample Type: Water								
Sample ID:	Ref. #: 106521	Extracted:	10652109	Extraction Method: SW46	350°C							
Analysis:	Ref. #: 106529	Analyzed:	1065	Analysis Method: Modified SW46								
				0909350-02*	0909350-03*							
				MATRIX SPANNING	MATRIX SPANNING							
COMPOUNDS	SAMPLE	SPLIT	METHOD BULK	Lab Control	SPLIT							
	PQ, ugL (ppb)	Diluted Amount ugL (ppb)	Diluted Amount ugL (ppb)	Diluted Amount ugL (ppb)	Diluted Amount ugL (ppb)							
		% Recovery		% Recovery	% Recovery							
Diazepam	0.400	1.65	ND	8.50	10.0	10.91	10.0	10.0	7.41	10.0	10.0	
Diazepam (ds)	0.400	4.0	ND	6.13	10.0	8.3	8.20	10.0	8.3	5.36	10.0	5.4
Diazepam (trs)	0.400	8.6	ND	8.49	10.0	8.5	6.94	10.0	6.9	5.68	10.0	5.7
SURROGATE COMPOUNDS			Diluted Amounts, ugL	Diluted Amounts, ugL	Diluted Amounts, ugL	Diluted Amounts, ugL	Diluted Amounts, ugL	Diluted Amounts, ugL	Diluted Amounts, ugL	Diluted Amounts, ugL	Diluted Amounts, ugL	
Naphthalene			14.5	10.00	145	4.92	10.00	49	6.67	10.00	6.19	10.00

*NSD was almost incorporated to drives leading to low recoveries.
Several samples had interferences leading to high sample recoveries.

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